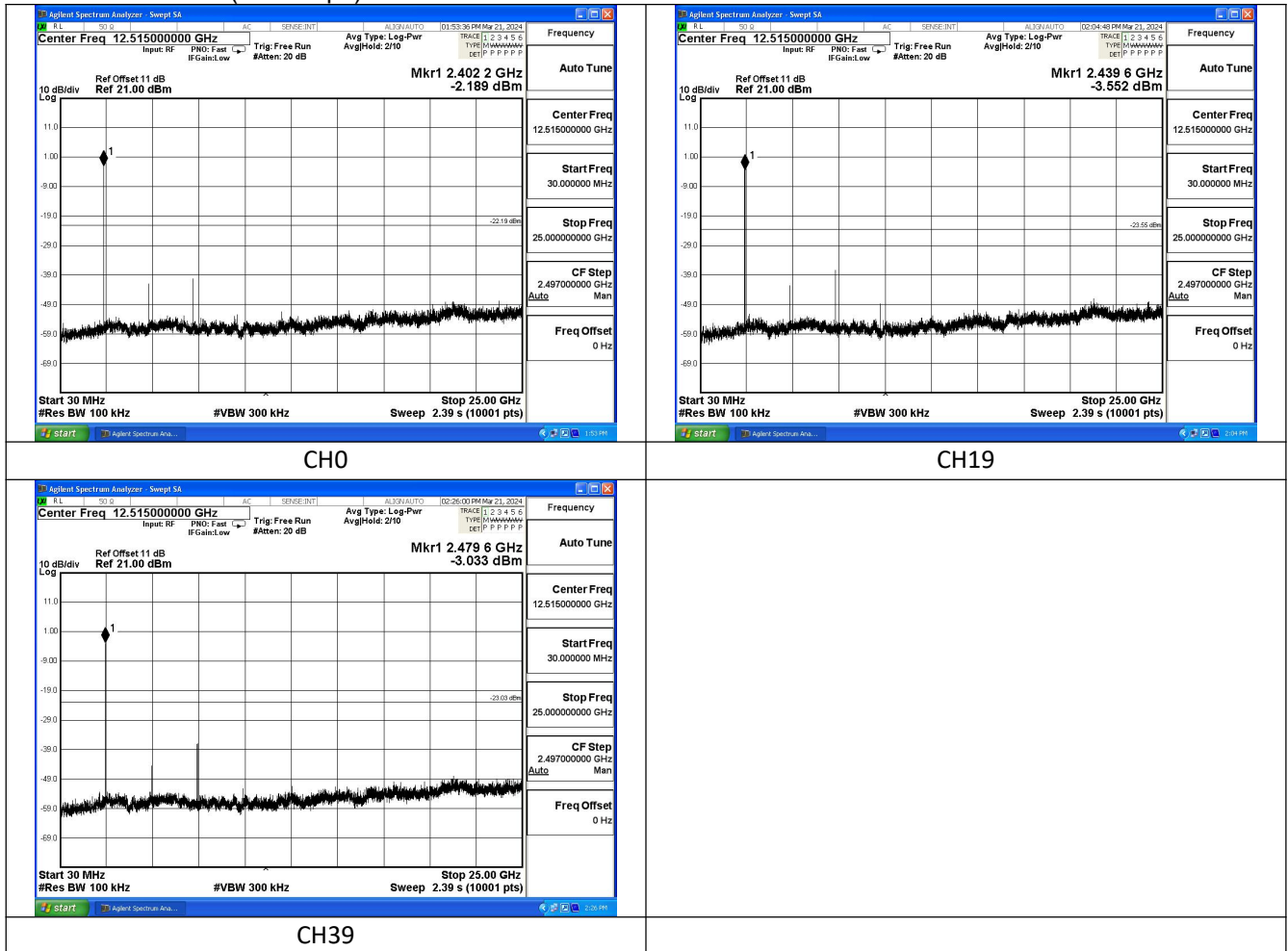
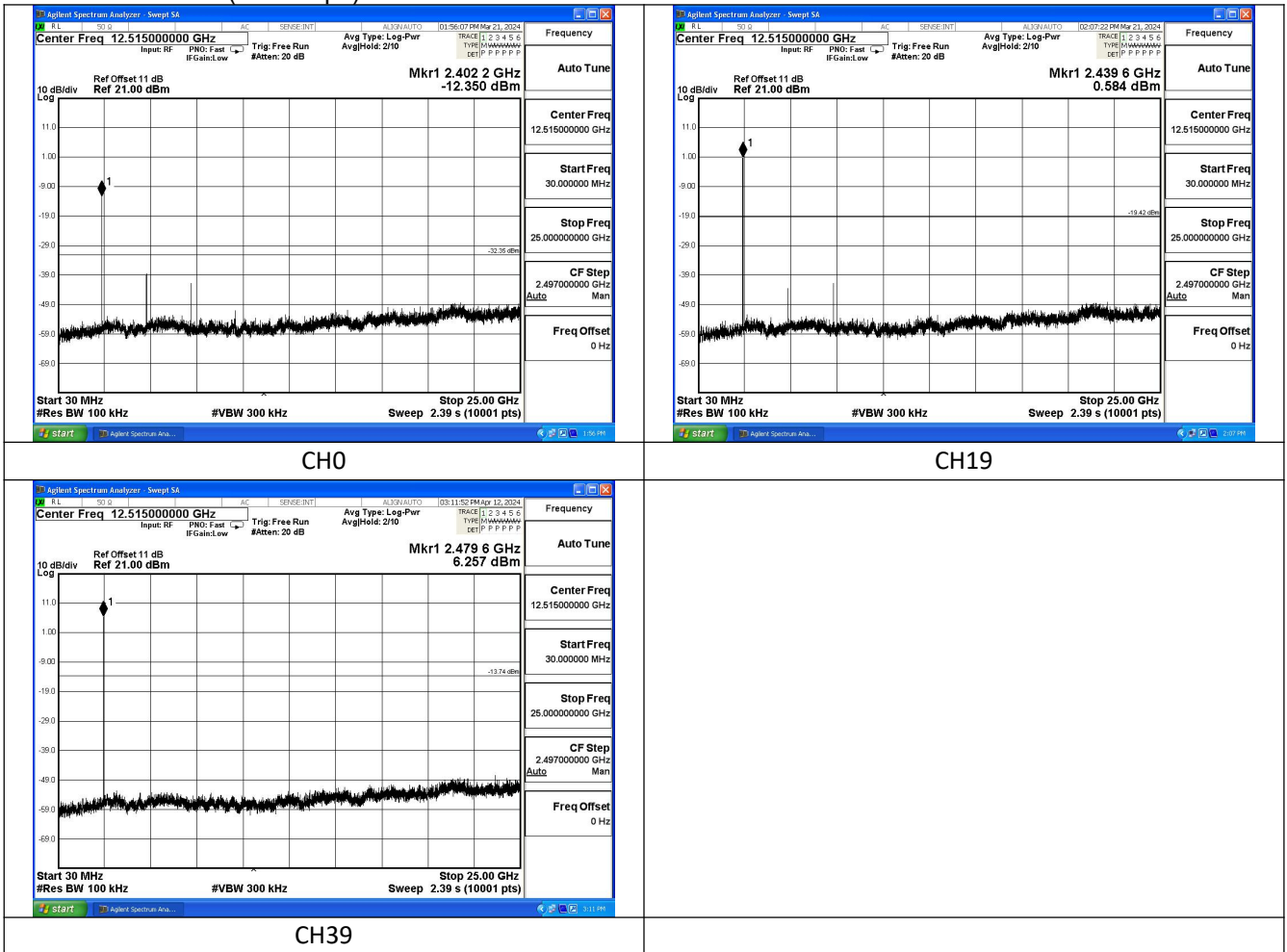


5 Conducted Out of band emission measurement

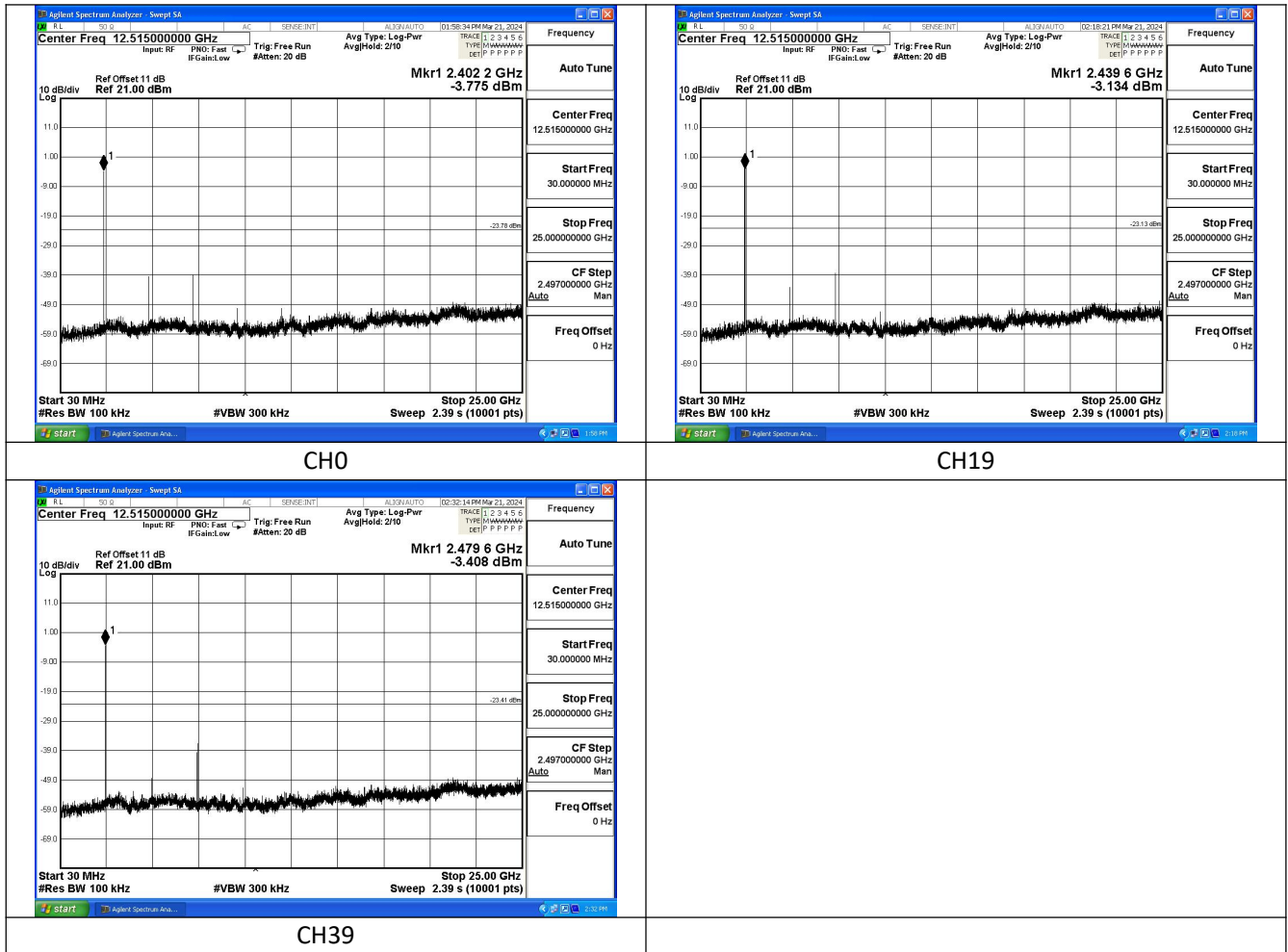
Test Mode: GFSK (LE 1Mbps)



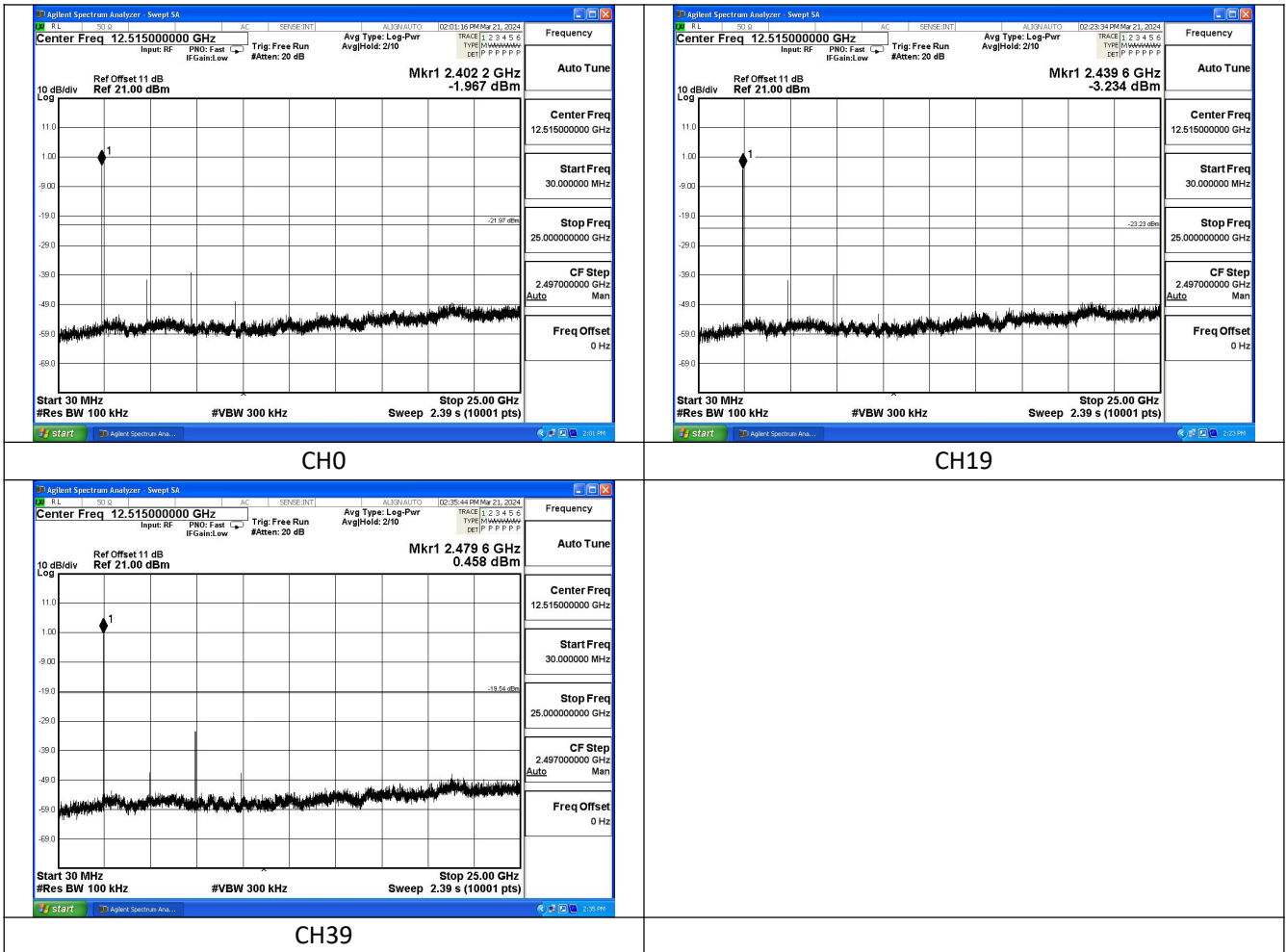
Test Mode: GFSK (LE 2Mbps)



Test Mode: Coded 125K

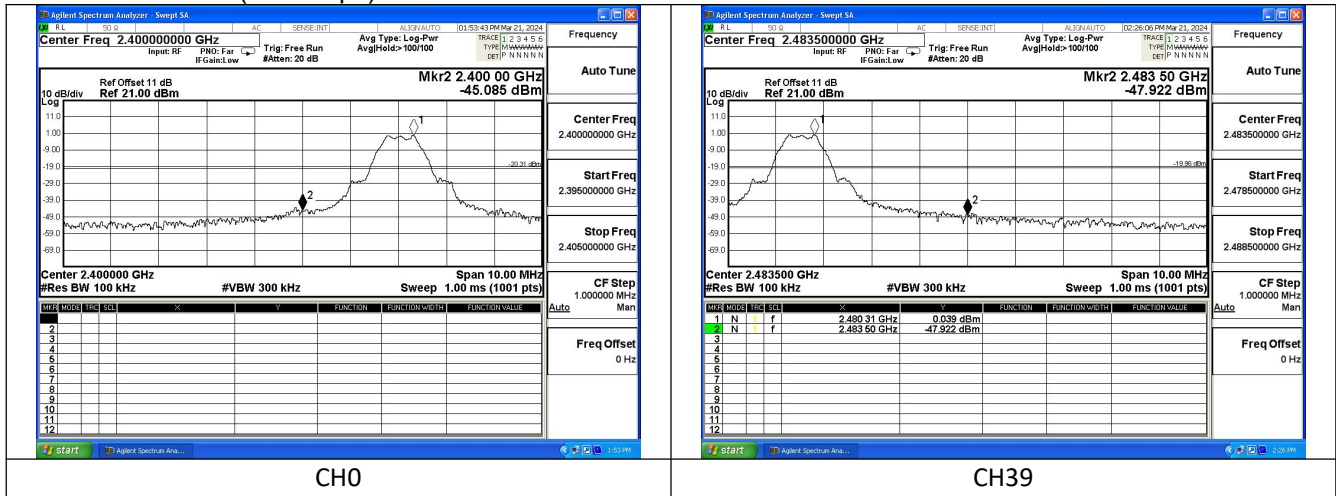


Test Mode: Coded 500K

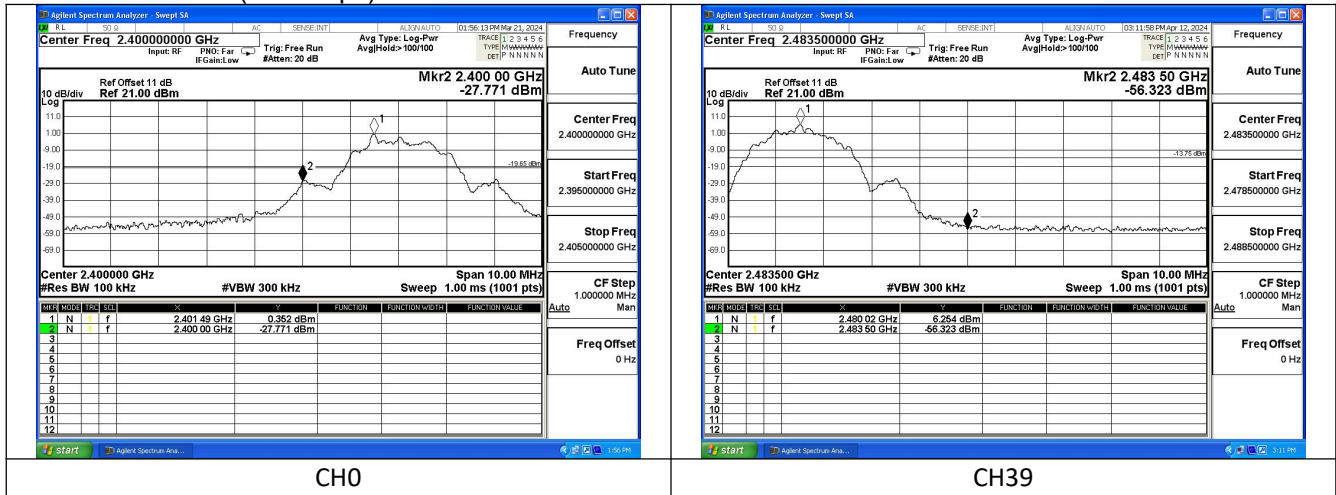


6 Band Edge measurement

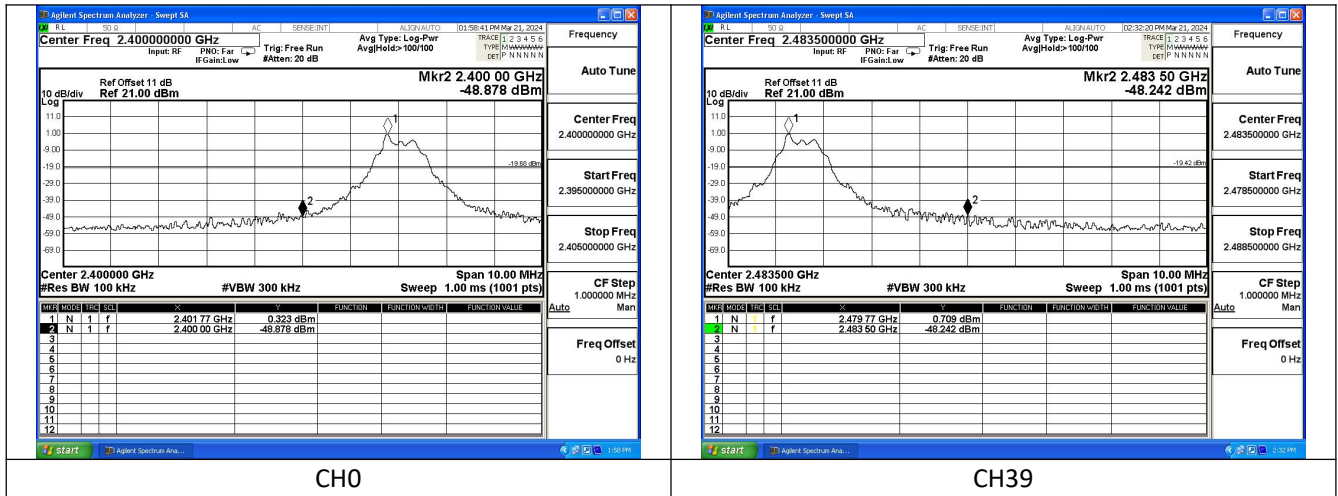
Test Mode: GFSK (LE 1Mbps)



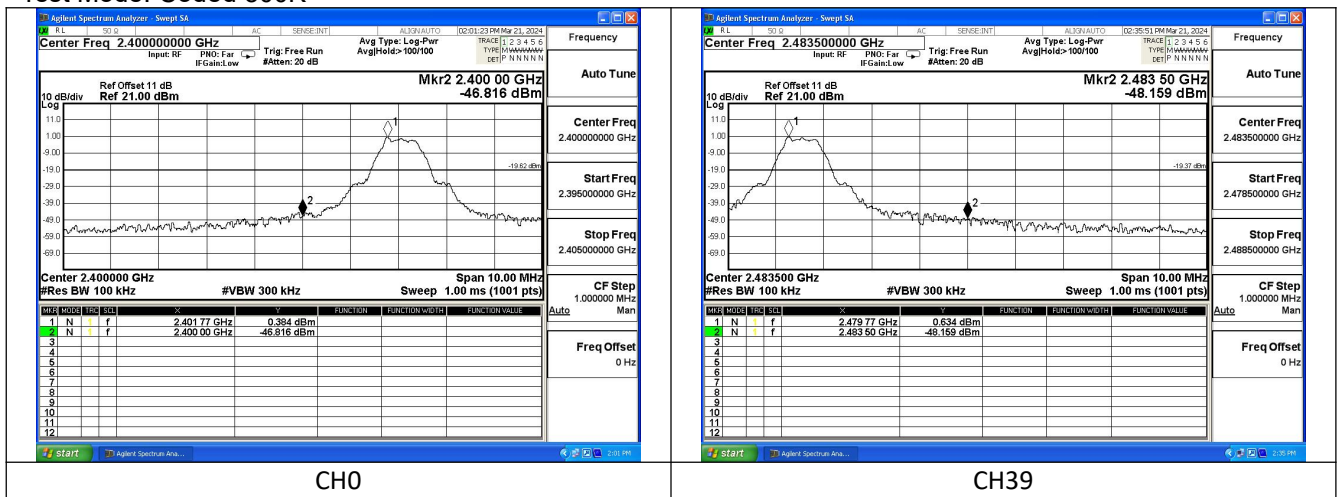
Test Mode: GFSK (LE 2Mbps)



Test Mode: Coded 125K



Test Mode: Coded 500K

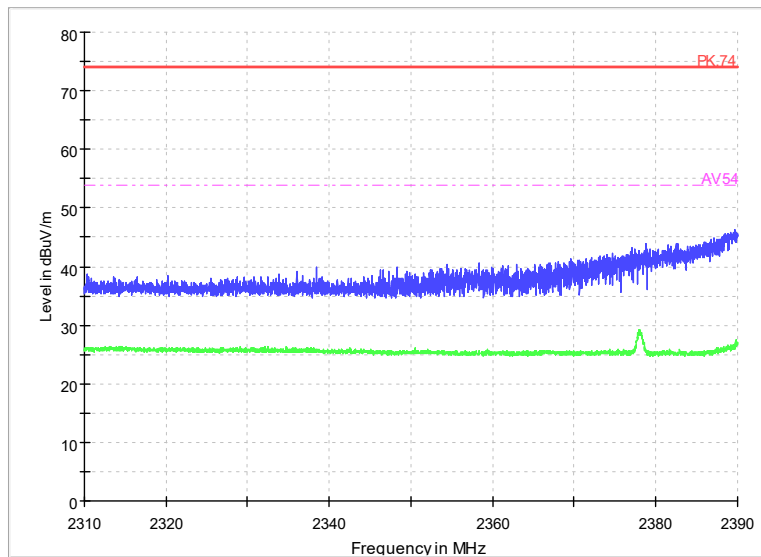


APPENDIX B – TEST DATA OF RADIATED EMISSION

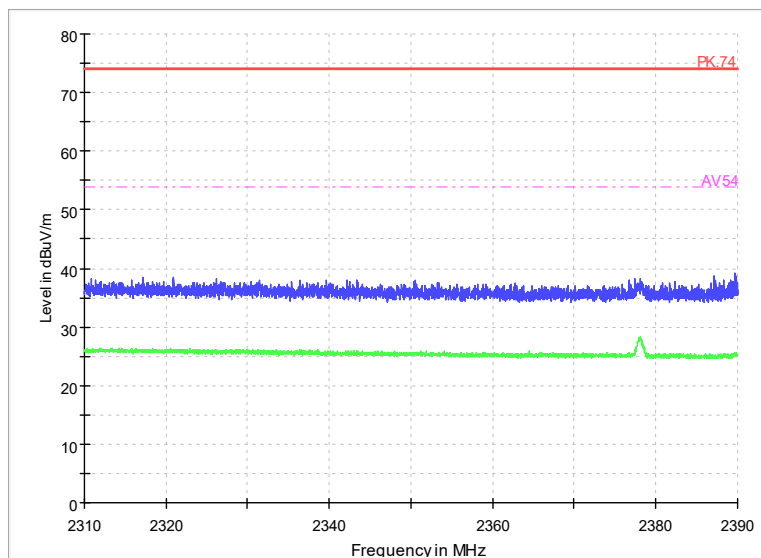
Note: The worst channel results are reflected in the report.

Note: The scanned graph represents the maximum of both horizontal and vertical polarizations and is not a single horizontal or vertical polarization scan.

Radiated Emission Band Edge

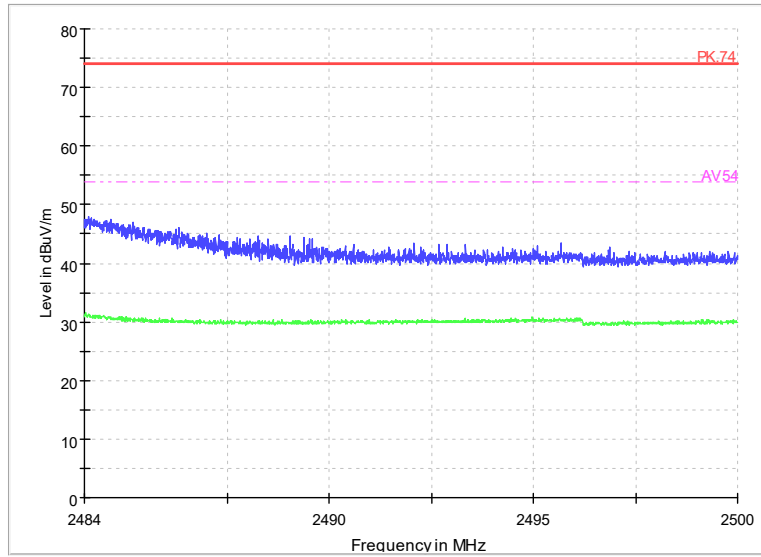


Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE 1Mbps)
Polarity: Vertical

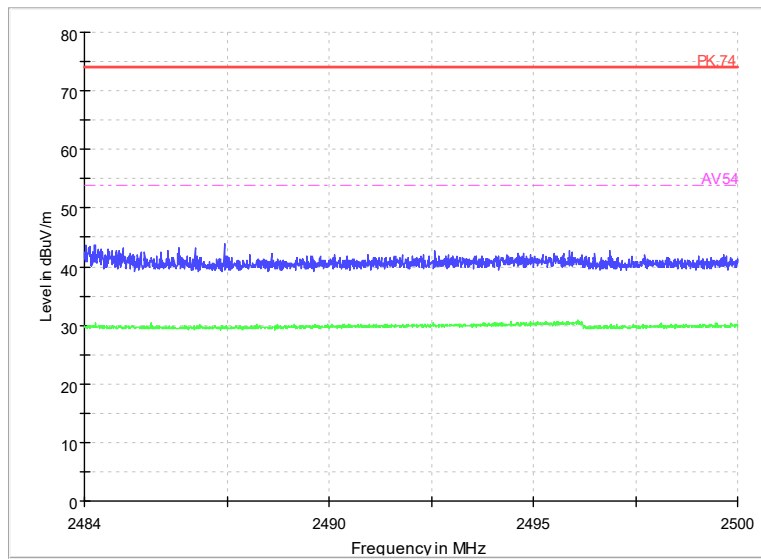


Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE 1Mbps)

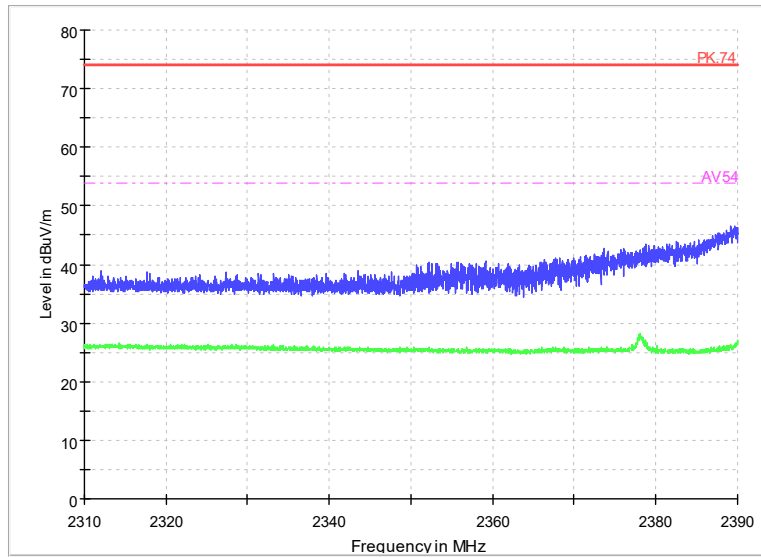
Polarity: Horizontal



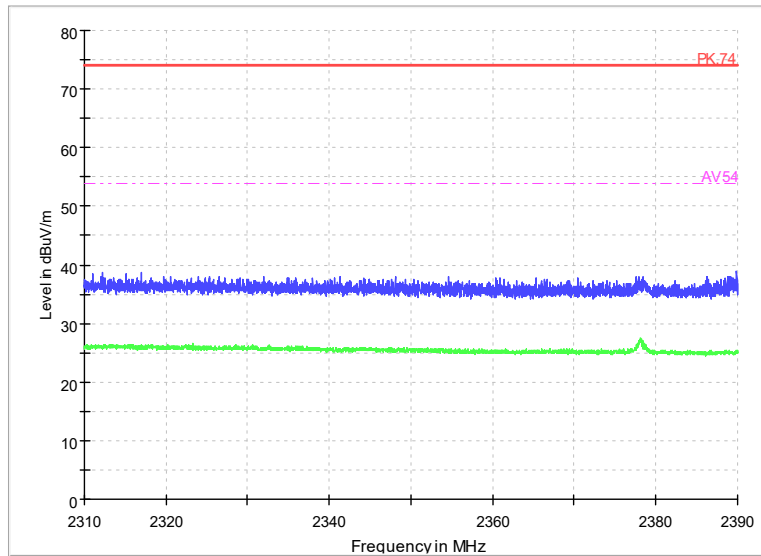
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE 1Mbps)
Polarity: Vertical



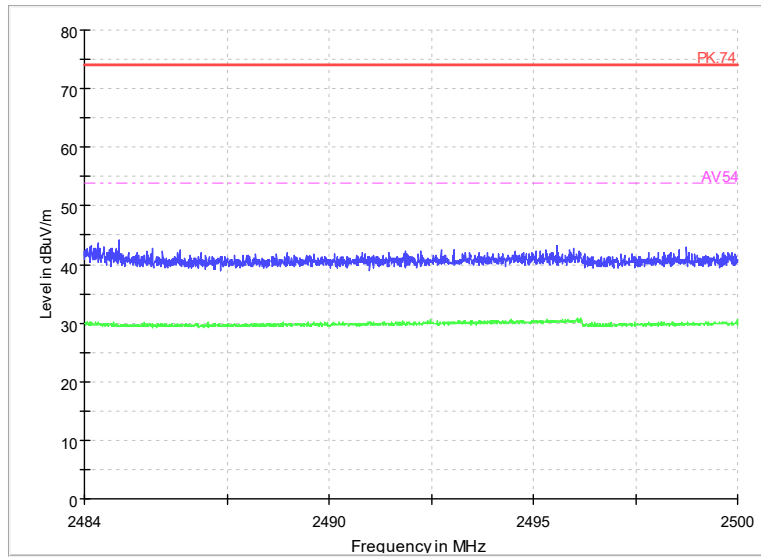
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE 1Mbps)
Polarity: Horizontal



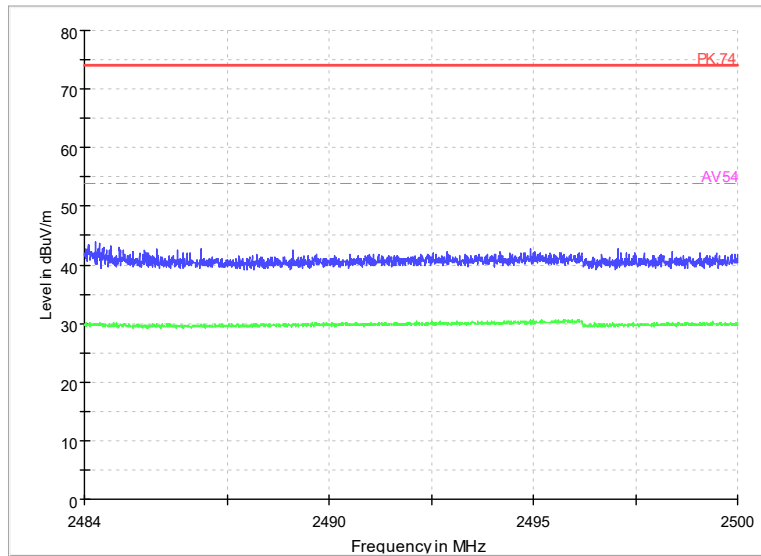
Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE 2Mbps)
Polarity: Vertical



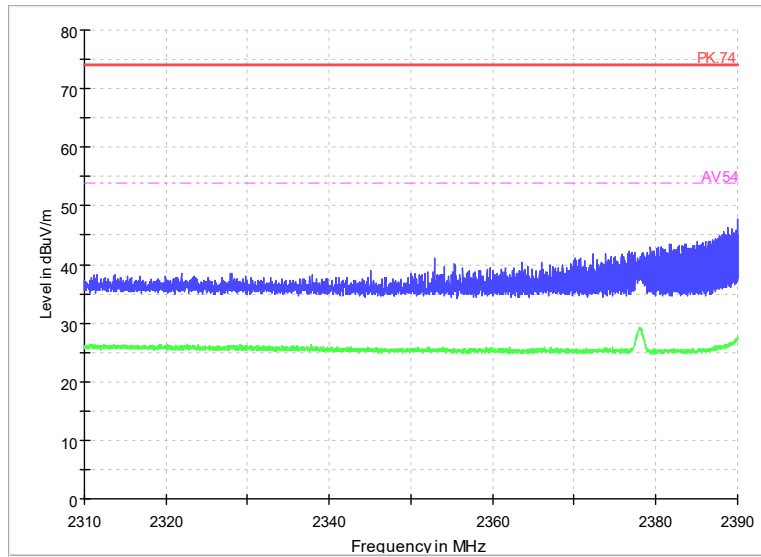
Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE 2Mbps)
Polarity: Horizontal



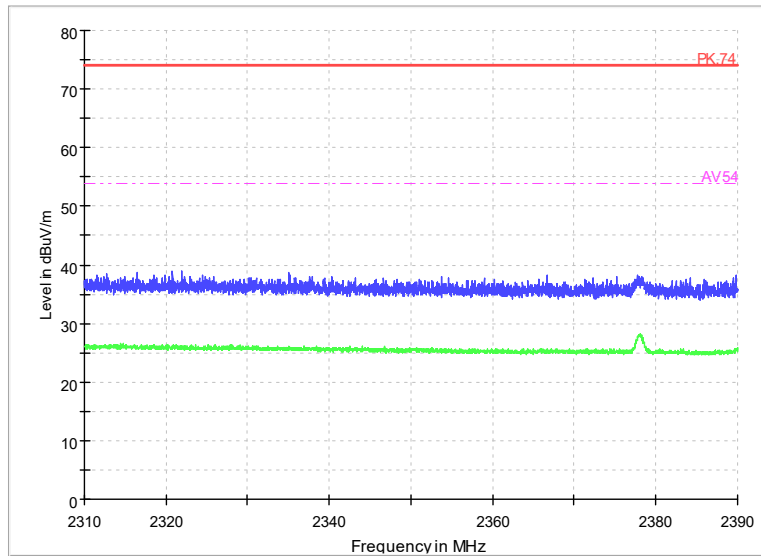
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE 2Mbps)
Polarity: Vertical



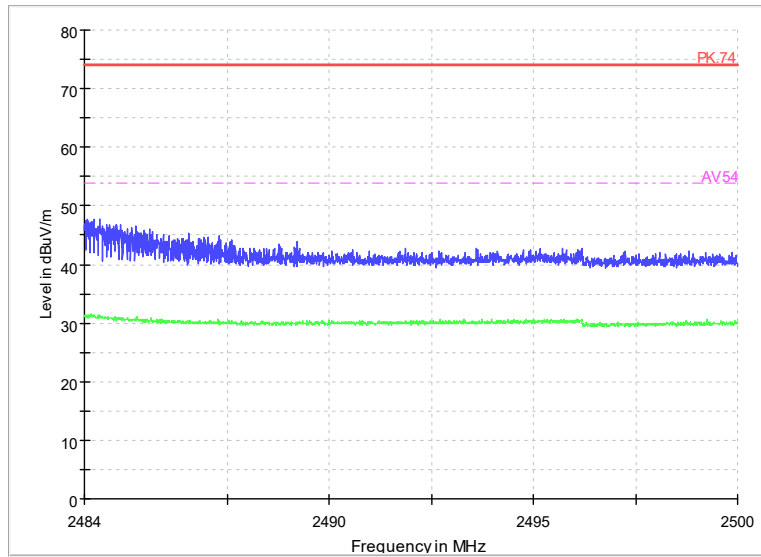
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE 2Mbps)
Polarity: Horizontal



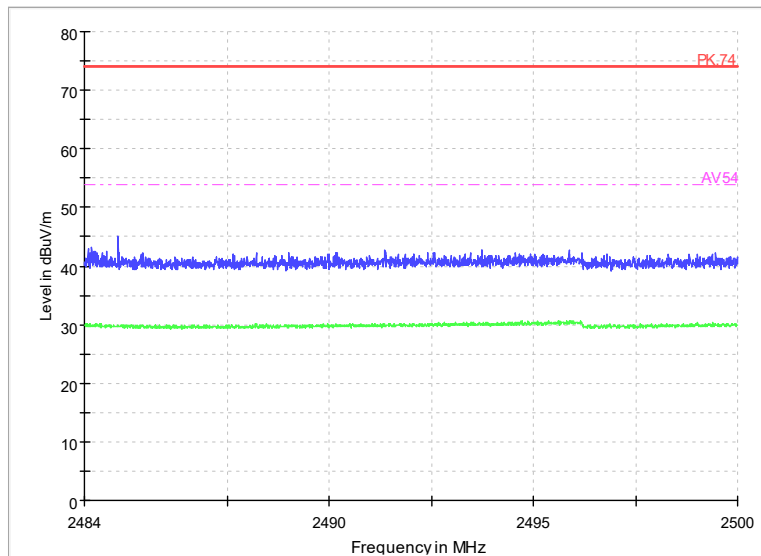
Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: Coded 125K
Polarity: Vertical



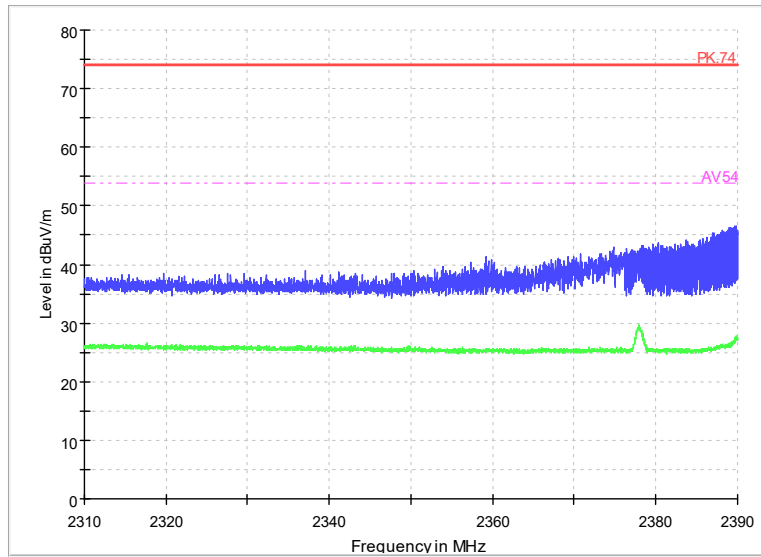
Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: Coded 125K
Polarity: Horizontal



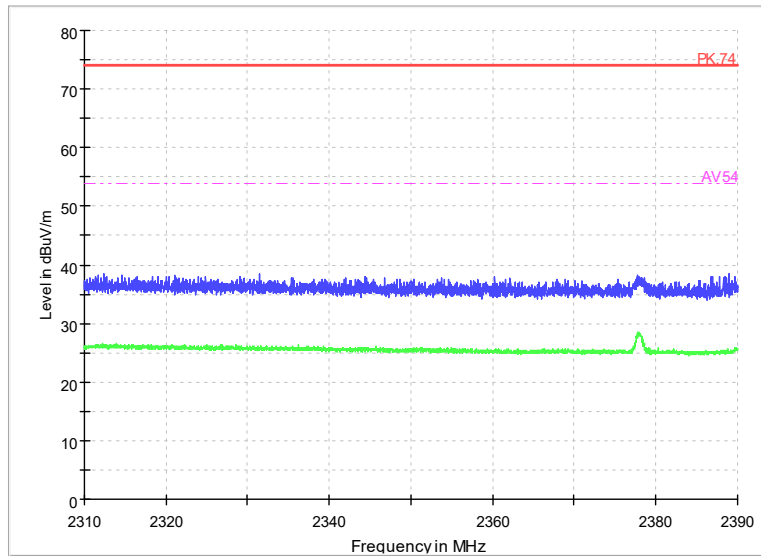
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: Coded 125K
Polarity: Vertical



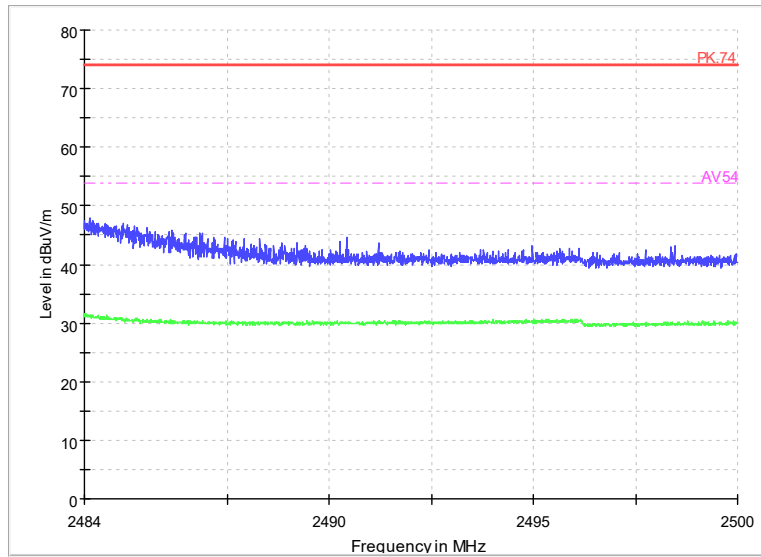
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: Coded 125K
Polarity: Horizontal



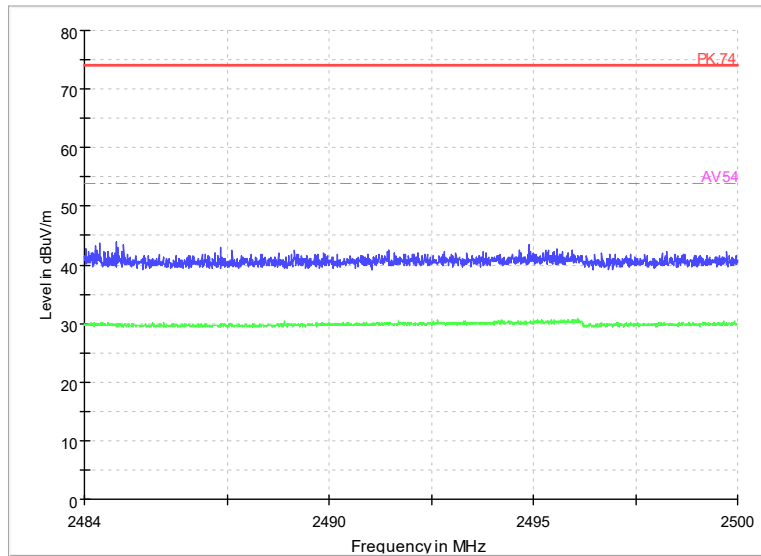
Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: Coded 500K
Polarity: Vertical



Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: Coded 500K
Polarity: Horizontal



Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: Coded 500K
Polarity: Vertical



Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: Coded 500K
Polarity: Horizontal

Sample Calculations

After comparison, the worst case attitude is EUT lay down.

Determining Spurious Emissions Levels

A “reference path loss” is established and the A_{Rpl} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

The measurement results are obtained as described below:

$$\text{Result} = P_{\text{mea}} + A_{Rpl}$$

Sample calculation: $(5.37 \text{ dB}\mu\text{V/m}) = (24.37 \text{ dBuV}) + (-19 \text{ dB/m})$, the corresponding frequency is 44.9865MHz.

For GFSK (LE 1Mbps)

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
43.9195	5.37	-19	24.37	Vertical	40	34.63
63.3195	4.29	-20.7	24.99	Vertical	40	35.71
111.2375	4.84	-19.8	24.64	Vertical	43.5	38.66
201.302	4	-19.9	23.9	Vertical	43.5	39.5
517.425	10.95	-11.9	22.85	Vertical	46	35.05
903.9215	15.9	-5.5	21.4	Vertical	46	30.1

Channel No.:19

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
51.631	6.2	-19.1	25.3	Vertical	40	33.8
65.114	4	-21.1	25.1	Vertical	40	36
97.803	5.19	-19.6	24.79	Vertical	43.5	38.31
304.0735	6.56	-17	23.56	Vertical	46	39.44
527.804	11.04	-11.7	22.74	Vertical	46	34.96
928.4625	16.38	-5.2	21.58	Vertical	46	29.62

Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
51.0975	6.13	-19	25.13	Vertical	40	33.87
58.227	5.6	-19.7	25.3	Vertical	40	34.4
111.4315	4.83	-19.8	24.63	Vertical	43.5	38.67
304.7525	6.54	-17	23.54	Vertical	46	39.46
517.9585	10.98	-11.9	22.88	Vertical	46	35.02
915.9495	16.13	-5.3	21.43	Vertical	46	29.87

For GFSK (LE 2Mbps)

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
46.1505	5.92	-18.9	24.82	Vertical	40	34.08

58.8575	5.14	-19.7	24.84	Vertical	40	34.86
97.5605	5.07	-19.6	24.67	Vertical	43.5	38.43
287.147	5.78	-17.5	23.28	Vertical	46	40.22
535.758	11.19	-11.5	22.69	Vertical	46	34.81
949.075	16.2	-5.1	21.3	Vertical	46	29.8

Channel No.:19

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.811	6.08	-18.9	24.98	Vertical	40	33.92
58.906	5.08	-19.8	24.88	Vertical	40	34.92
105.078	4.92	-19.6	24.52	Vertical	43.5	38.58
297.3805	6.24	-17.2	23.44	Vertical	46	39.76
506.9005	10.49	-12.1	22.59	Vertical	46	35.51
949.851	16.21	-5.1	21.31	Vertical	46	29.79

Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
52.116	6.11	-19.1	25.21	Vertical	40	33.89
59.1	4.96	-19.8	24.76	Vertical	40	35.04
128.261	2.89	-21.6	24.49	Vertical	43.5	40.61
275.8465	5.61	-17.8	23.41	Vertical	46	40.39
547.204	11.26	-11.2	22.46	Vertical	46	34.74
958.9205	16.23	-5	21.23	Vertical	46	29.77

For Coded 125K

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.229	6.11	-18.9	25.01	Vertical	40	33.89
58.227	5.41	-19.7	25.11	Vertical	40	34.59
101.489	3.71	-19.5	23.21	Vertical	43.5	39.79
305.092	6.48	-17	23.48	Vertical	46	39.52
519.3165	10.98	-11.9	22.88	Vertical	46	35.02
916.7255	15.97	-5.3	21.27	Vertical	46	30.03

Channel No.:19

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
44.7925	6.08	-18.9	24.98	Vertical	40	33.92
55.511	3.58	-19.4	22.98	Vertical	40	36.42
104.981	4.88	-19.6	24.48	Vertical	43.5	38.62
206.346	3.96	-19.7	23.66	Vertical	43.5	39.54
522.663	10.83	-11.8	22.63	Vertical	46	35.17
924.5825	15.98	-5.3	21.28	Vertical	46	30.02

Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
51.2915	5.96	-19	24.96	Vertical	40	34.04
57.936	5.48	-19.7	25.18	Vertical	40	34.52
99.2095	4.68	-19.5	24.18	Vertical	43.5	38.82
207.413	3.96	-19.7	23.66	Vertical	43.5	39.54
524.5545	11.08	-11.8	22.88	Vertical	46	34.92
939.2295	16.24	-5.1	21.34	Vertical	46	29.76

For Coded 500K

Channel No.:0

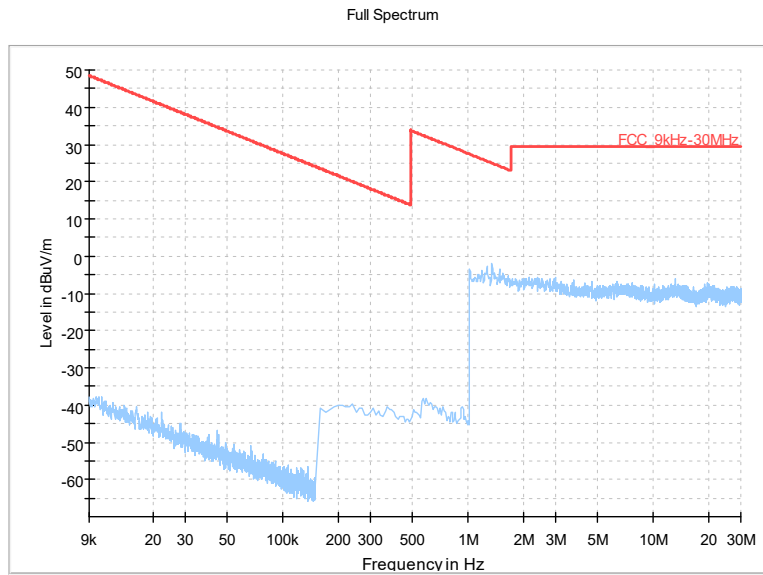
Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
39.7485	17.22	-18.7	35.92	Vertical	40	22.78
82.768	16.15	-20.8	36.95	Vertical	40	23.85
100.422	15.13	-18.7	33.83	Vertical	43.5	28.37
197.4705	17.93	-19	36.93	Vertical	43.5	25.57
518.783	12.87	-10.2	23.07	Vertical	46	33.13
872.3965	17.49	-3.8	21.29	Vertical	46	28.51

Channel No.:19

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
52.31	5.78	-19.1	24.88	Vertical	40	34.22
70.352	2.49	-22.3	24.79	Vertical	40	37.51
98.094	4.98	-19.5	24.48	Vertical	43.5	38.52
306.45	6.32	-16.9	23.22	Vertical	46	39.68
547.01	11.16	-11.2	22.36	Vertical	46	34.84
951.6455	16.04	-5.1	21.14	Vertical	46	29.96

Channel No.:39

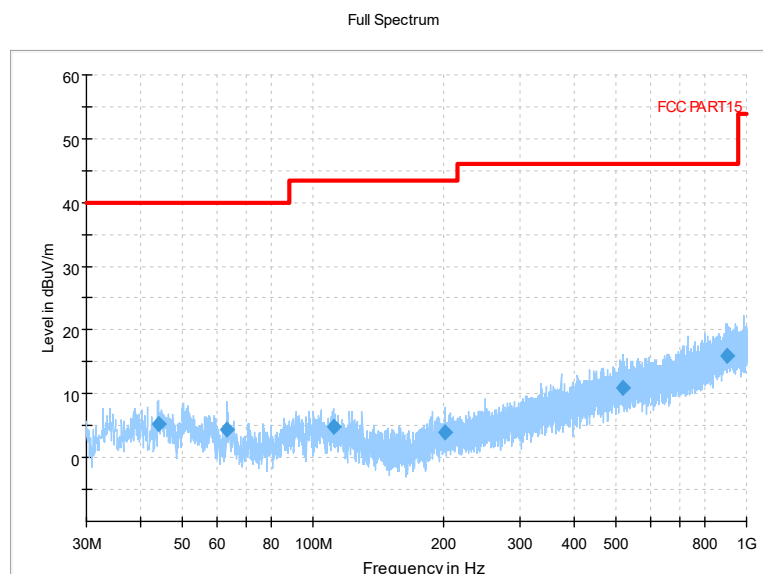
Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
32.425	3.68	-20.4	24.08	Vertical	40	36.32
59.391	4.29	-19.8	24.09	Vertical	40	35.71
115.457	3.77	-20.1	23.87	Vertical	43.5	39.73
283.6065	5.87	-17.6	23.47	Vertical	46	40.13
530.811	10.82	-11.6	22.42	Vertical	46	35.18
900.769	15.43	-5.5	20.93	Vertical	46	30.57



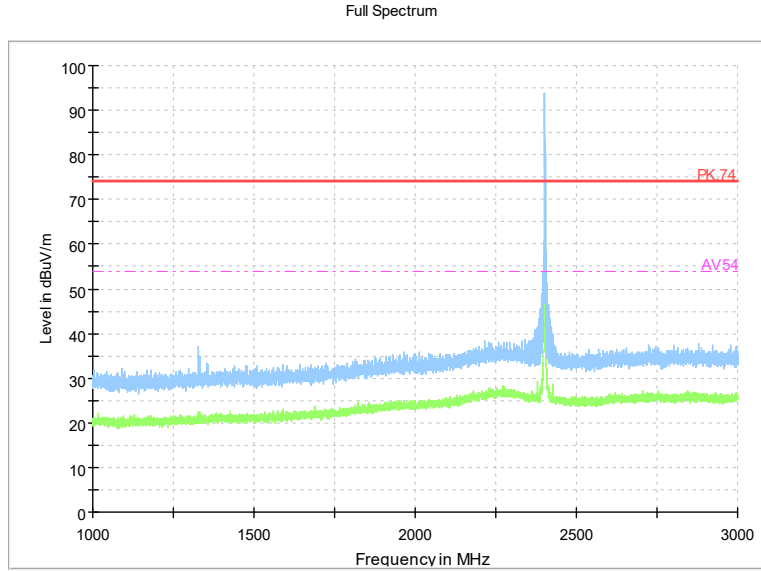
Frequency Range: 9kHz -30MHz
Detector: QP mode

Note: The relevant tests have been performed in order to verify in which mode would have the worst features, the result show above is the worst case.

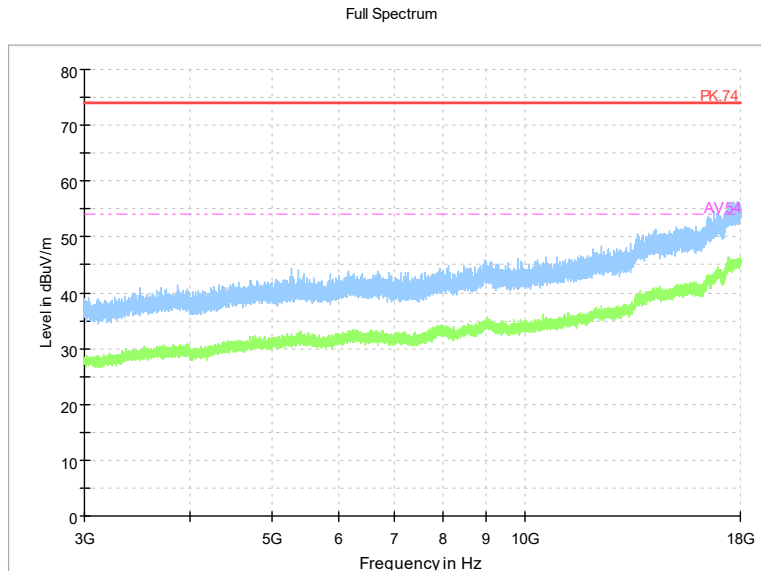
Channel No.:0



Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: GFSK (LE 1Mbps)



Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)



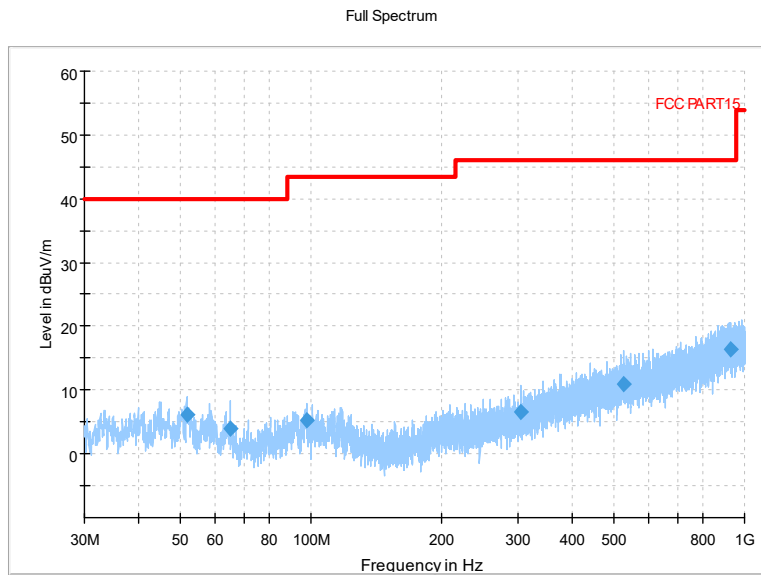
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)

Full Spectrum

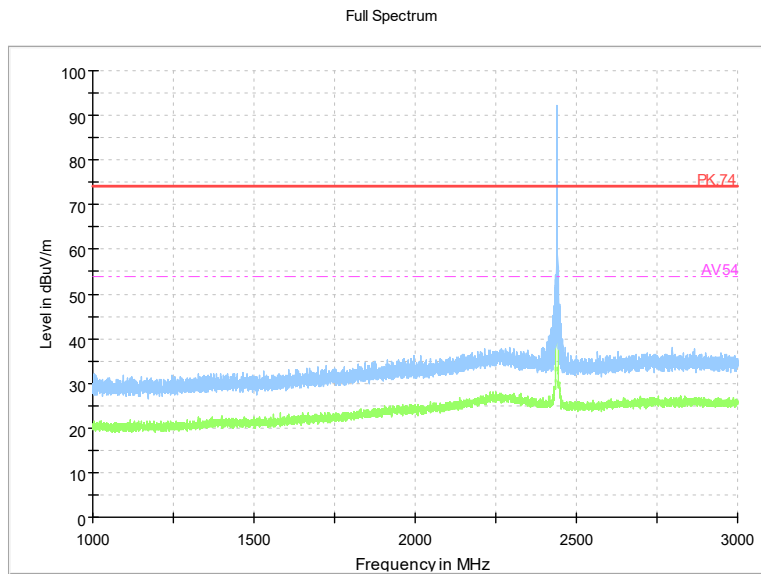


Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)

Channel No.:19

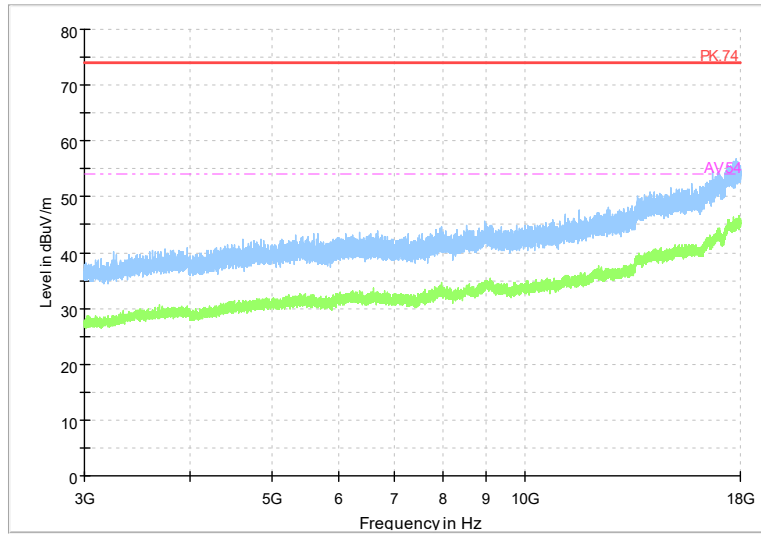


Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: GFSK (LE 1Mbps)



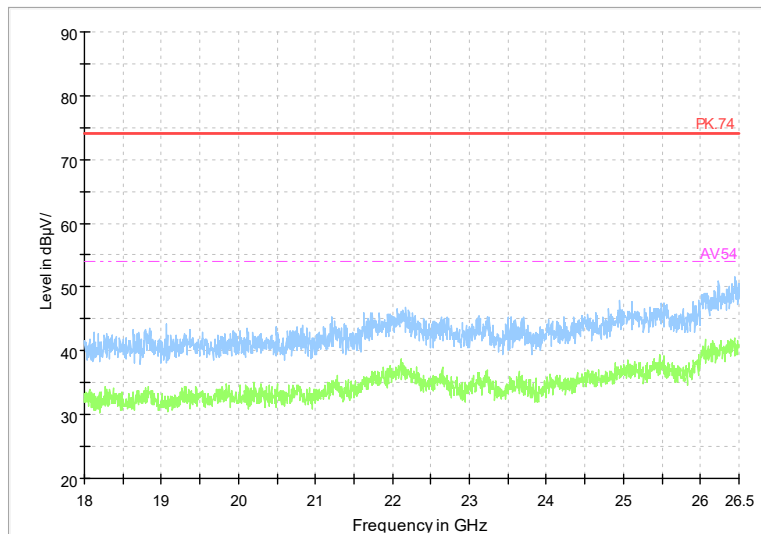
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)

Full Spectrum



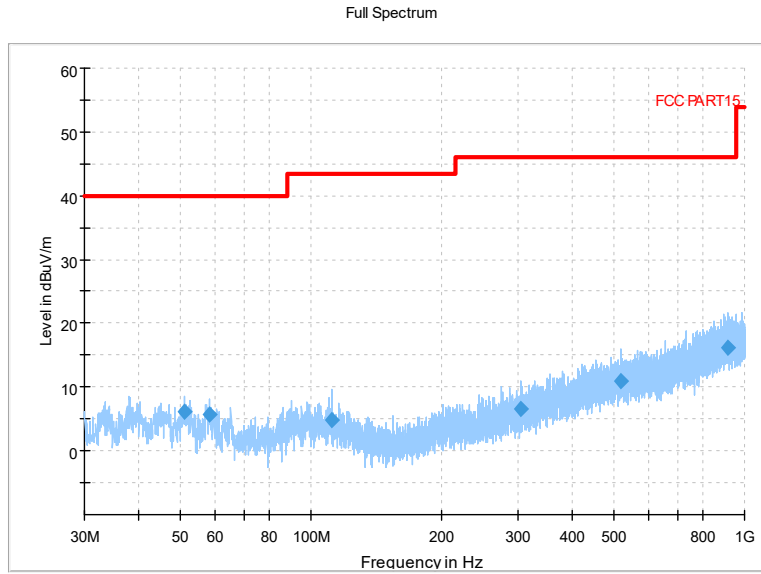
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)

Full Spectrum

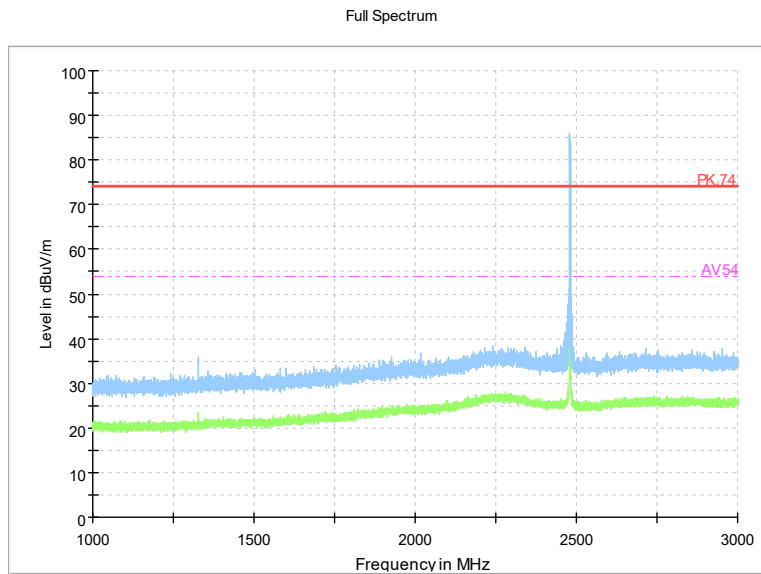


Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)

Channel No.:39

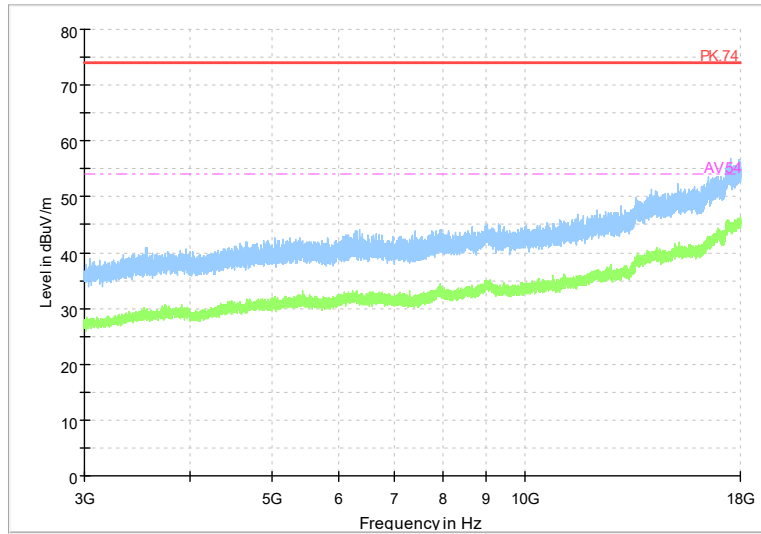


Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: GFSK (LE 1Mbps)



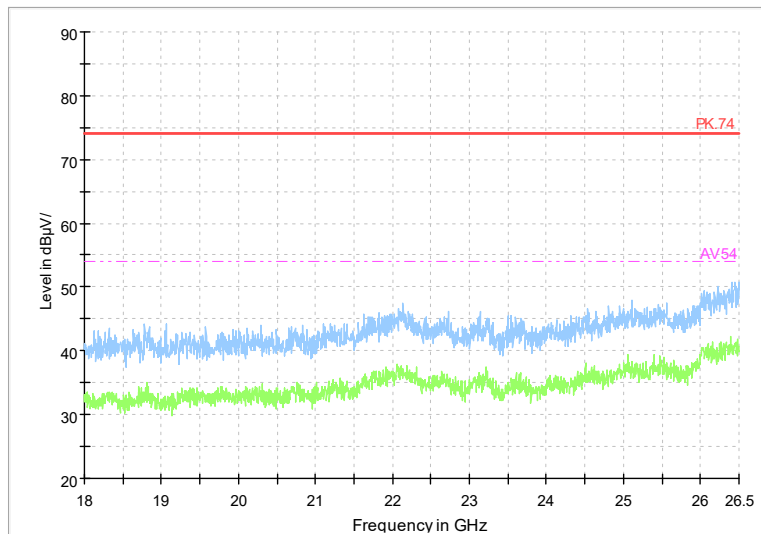
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)

Full Spectrum



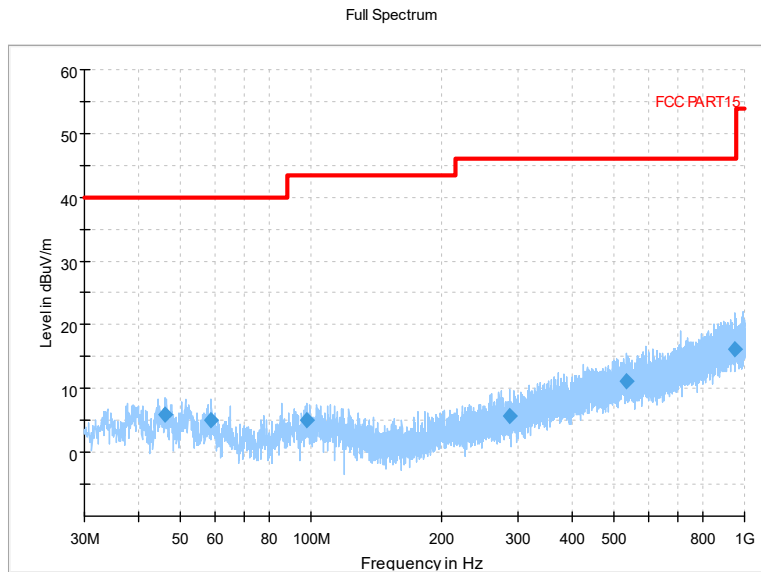
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)

Full Spectrum

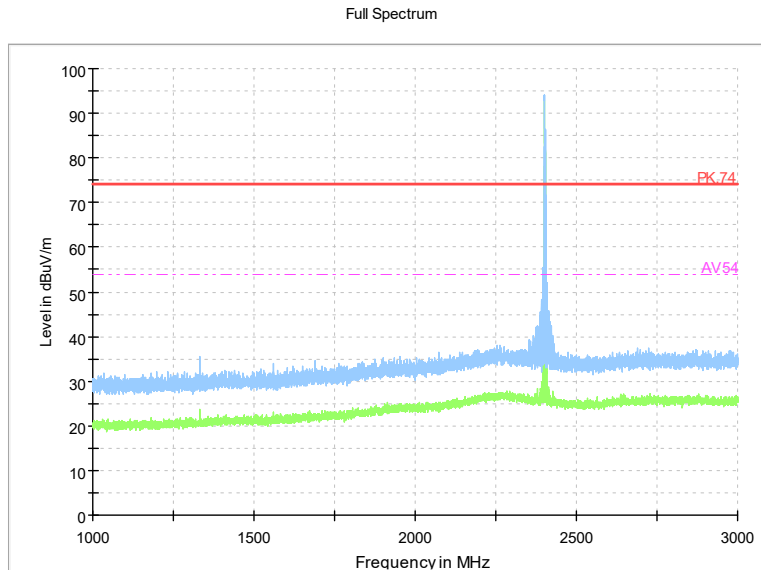


Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)

Channel No.:0

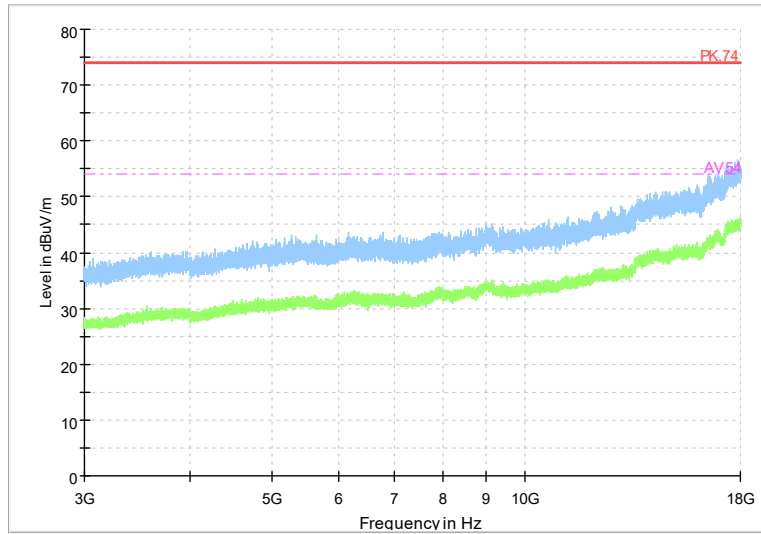


Frequency Range: 30MHz-1GHz
Detector:QP mode
Modulation type: GFSK (LE 2Mbps)



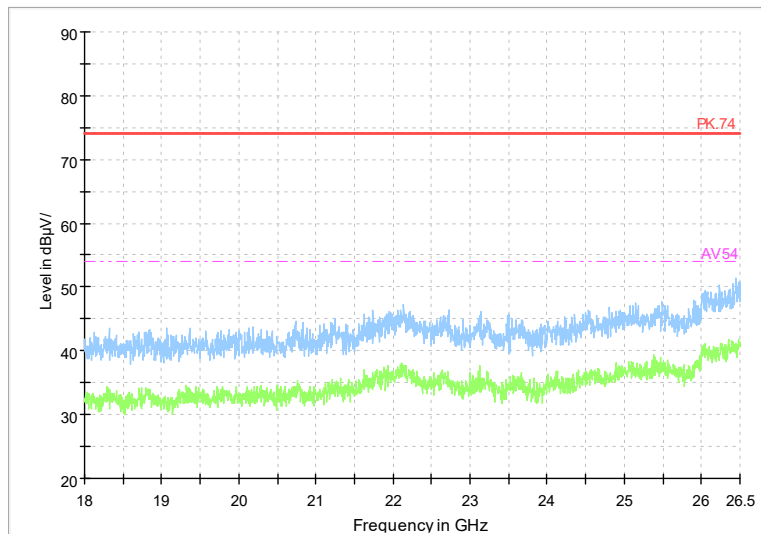
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

Full Spectrum



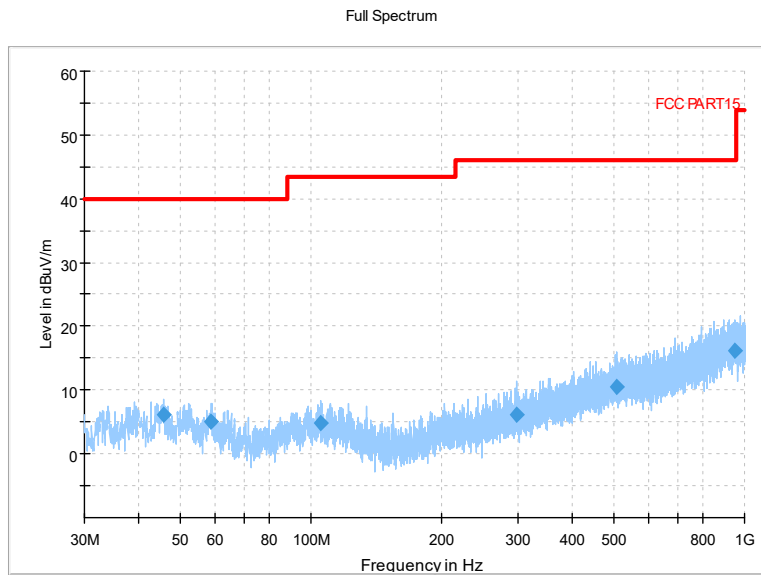
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

Full Spectrum

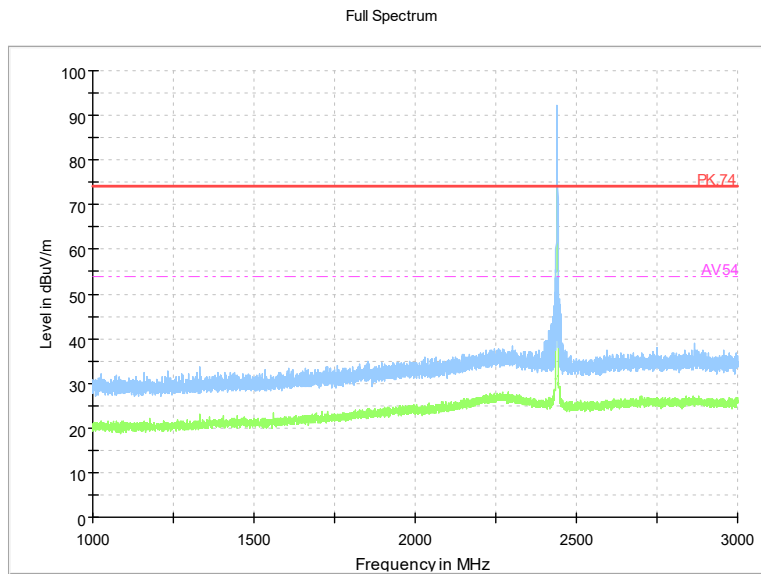


Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

Channel No.:19

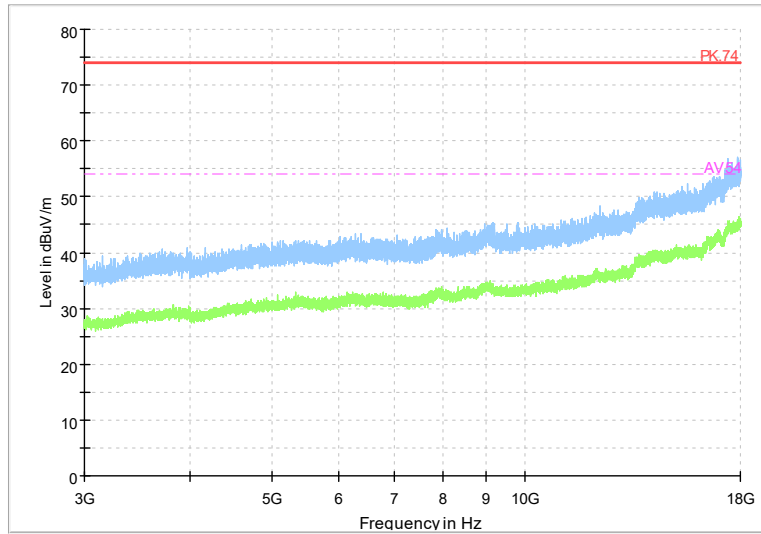


Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: GFSK (LE 2Mbps)



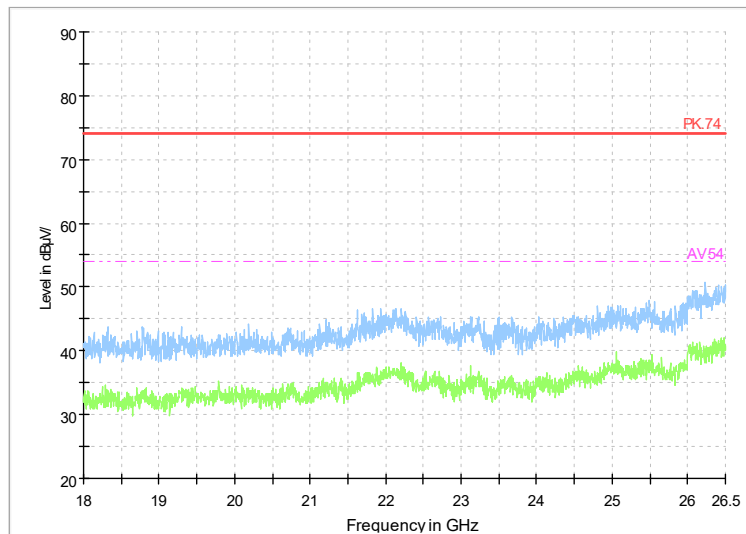
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

Full Spectrum



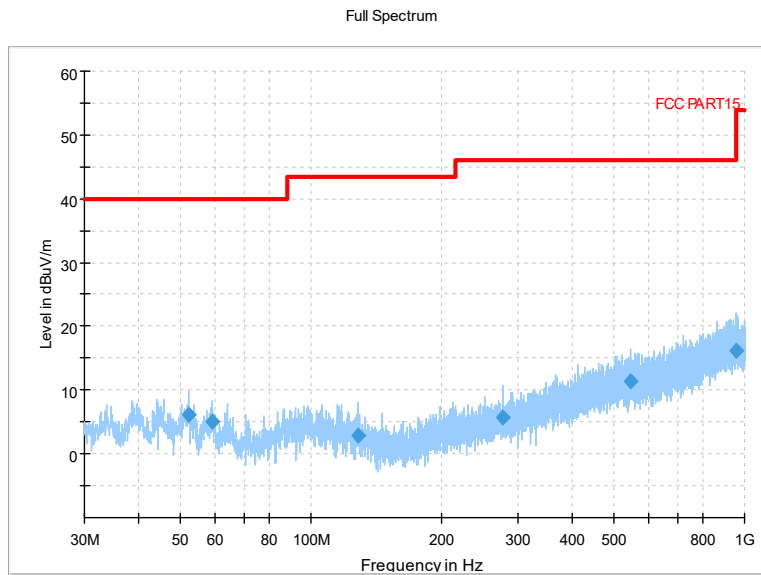
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

Full Spectrum

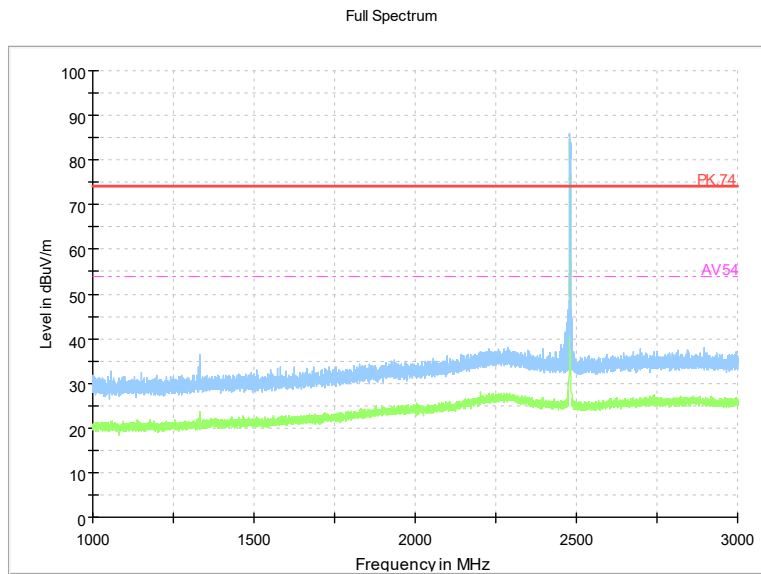


Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

Channel No.:39

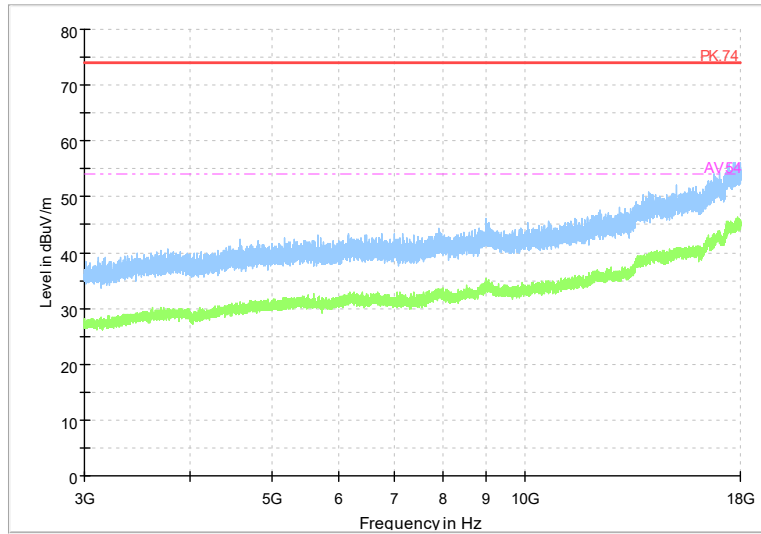


Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: GFSK (LE 2Mbps)



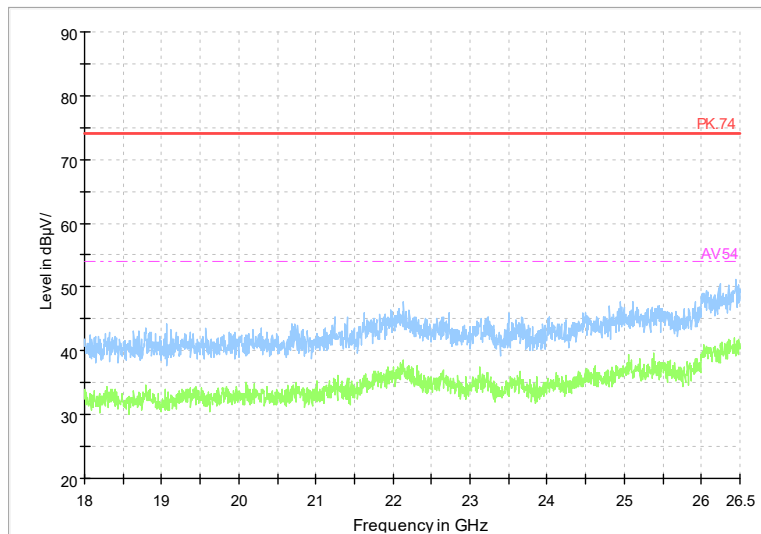
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

Full Spectrum



Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

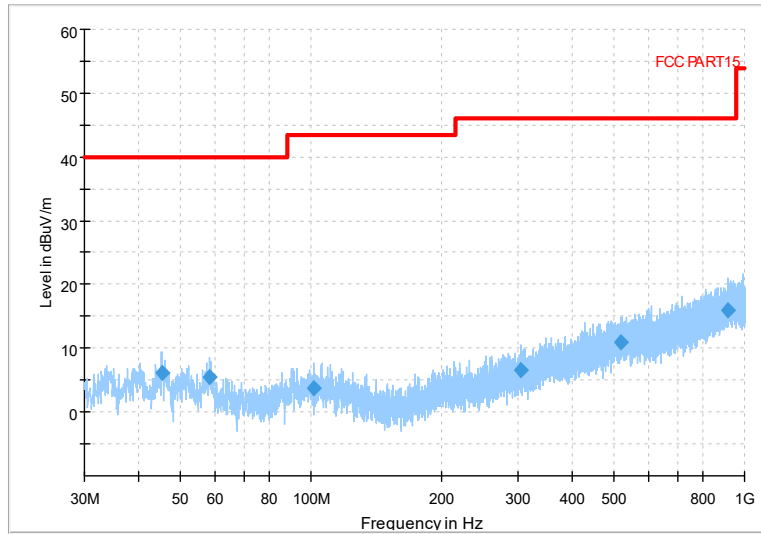
Full Spectrum



Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

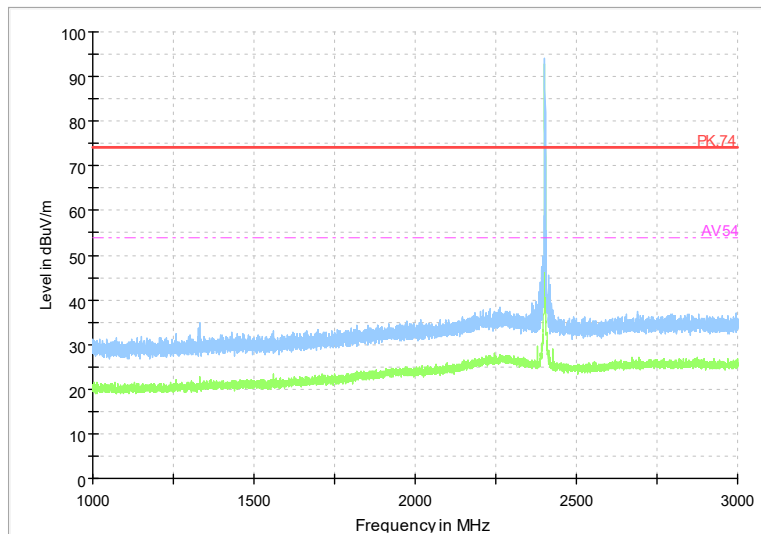
Channel No.:0

Full Spectrum



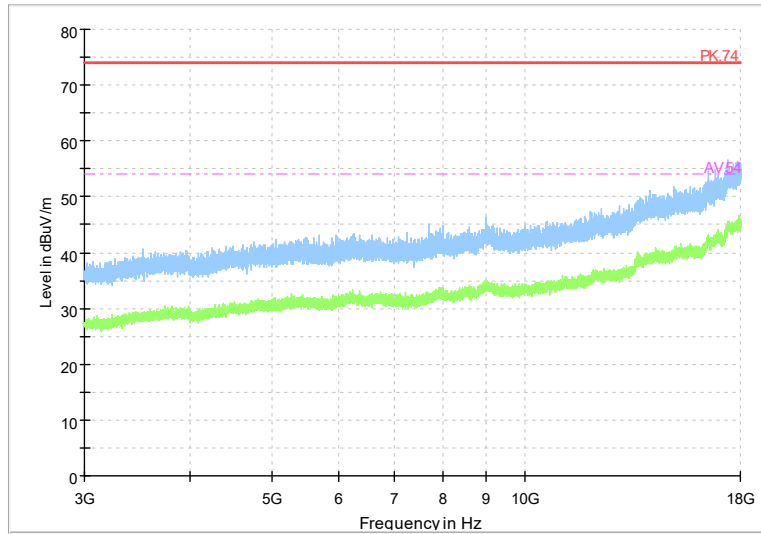
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 125K

Full Spectrum



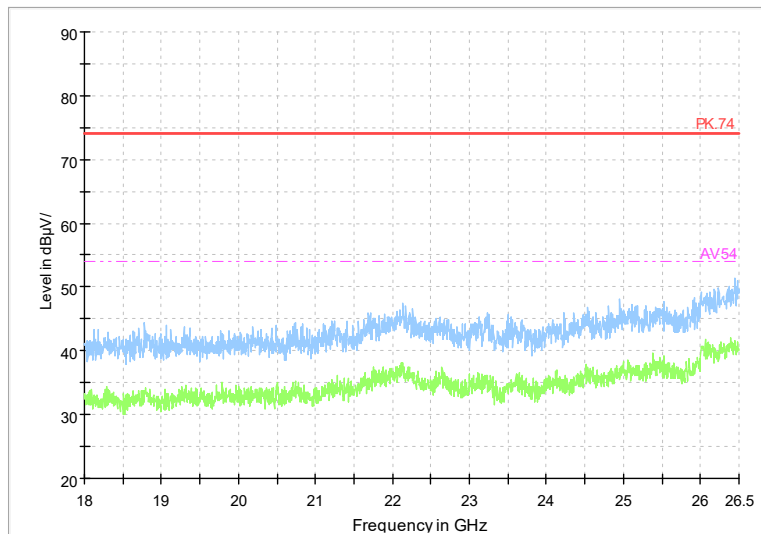
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

Full Spectrum



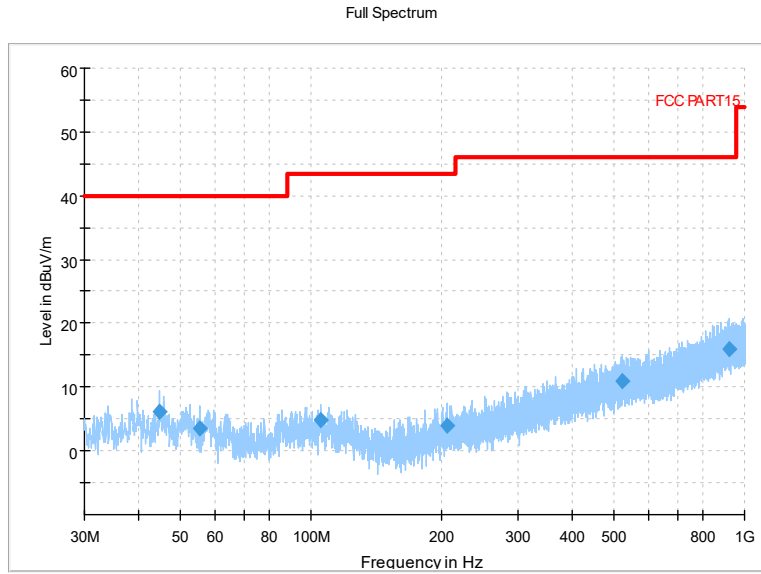
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

Full Spectrum

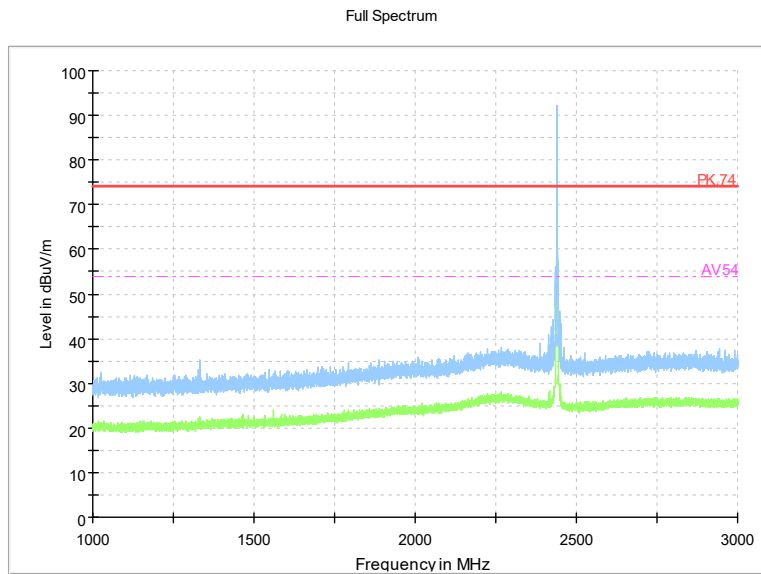


Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

Channel No.:19

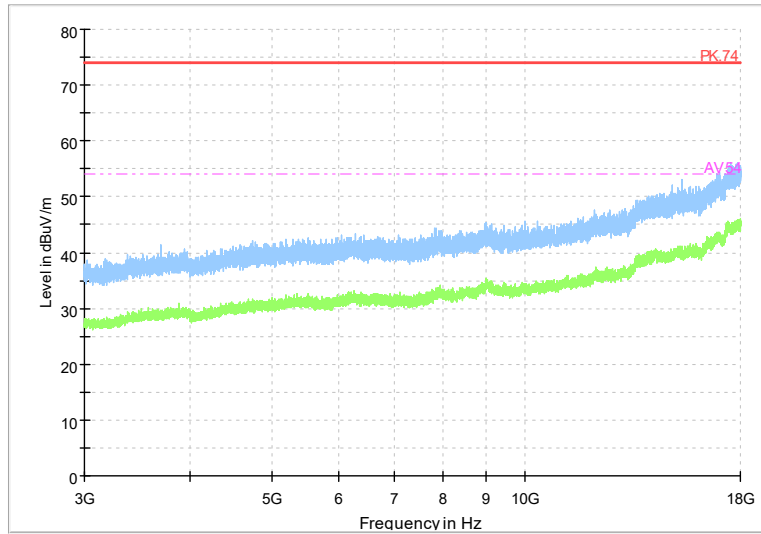


Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 125K



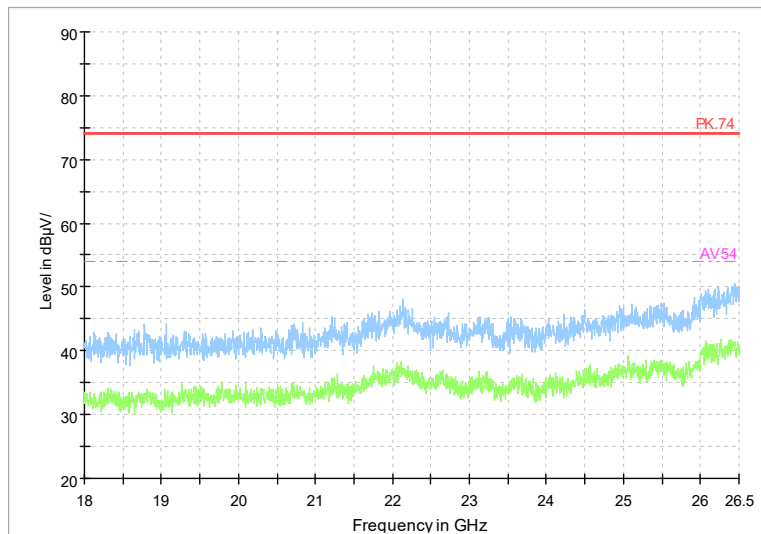
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

Full Spectrum



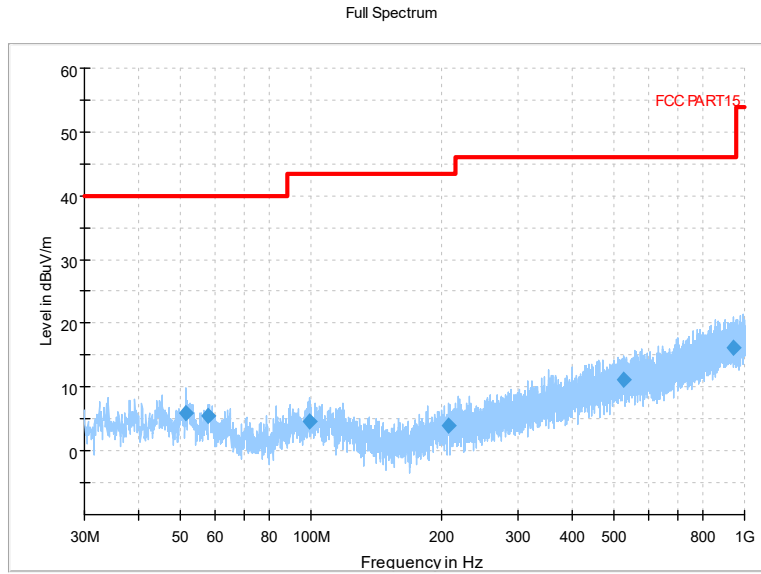
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

Full Spectrum

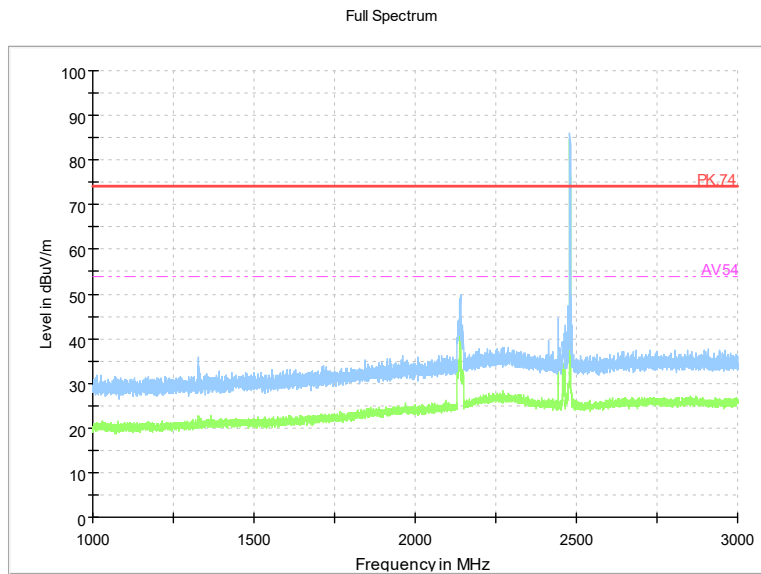


Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

Channel No.:39

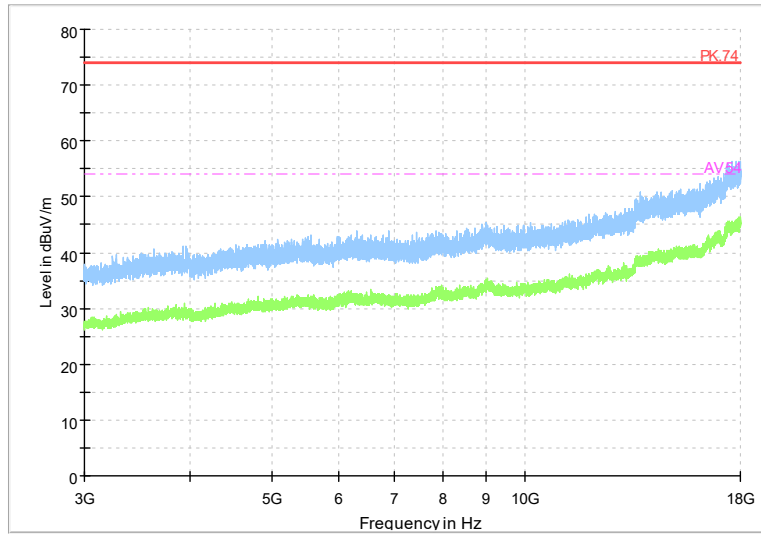


Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 125K



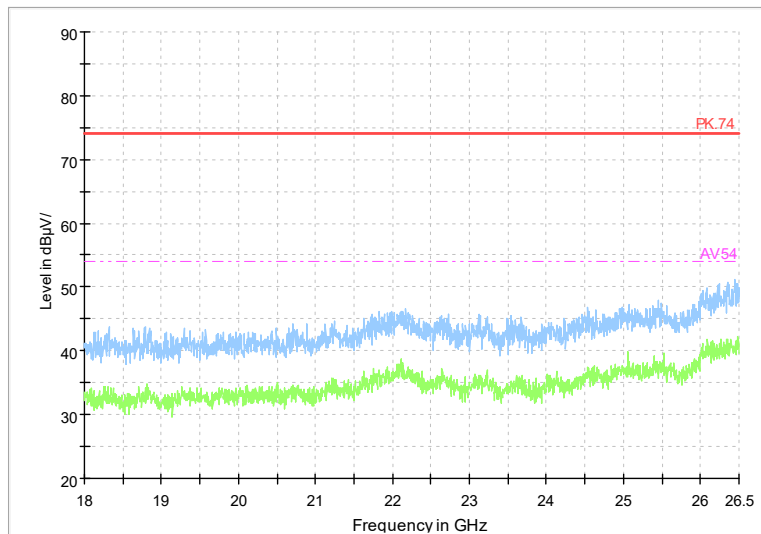
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

Full Spectrum



Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

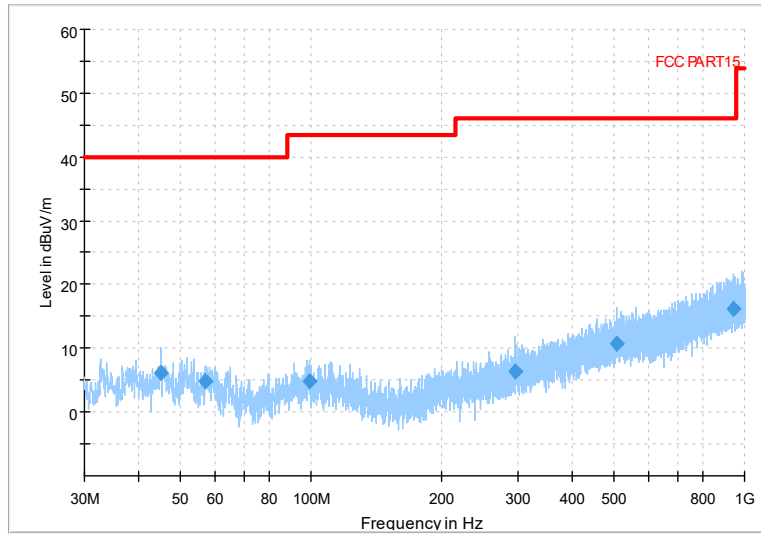
Full Spectrum



Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

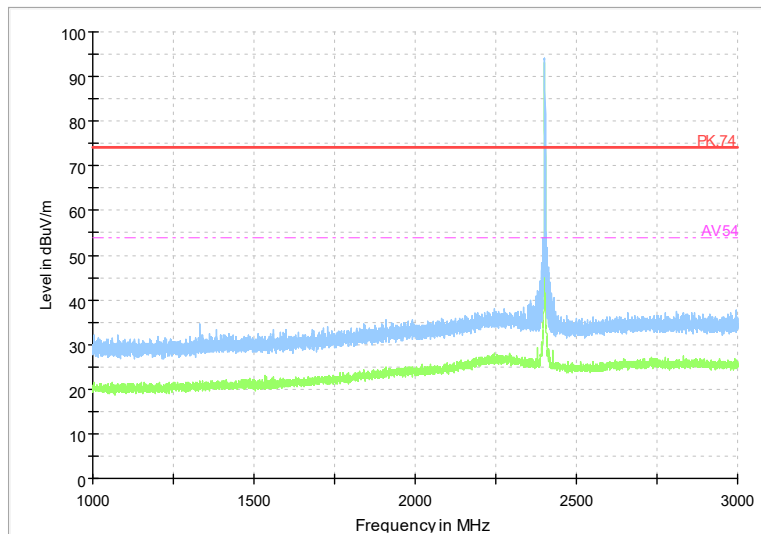
Channel No.:0

Full Spectrum



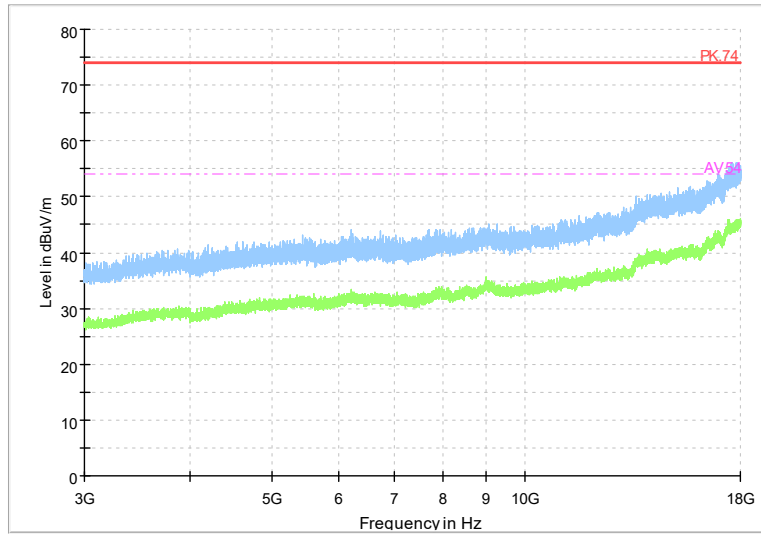
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 500K

Full Spectrum



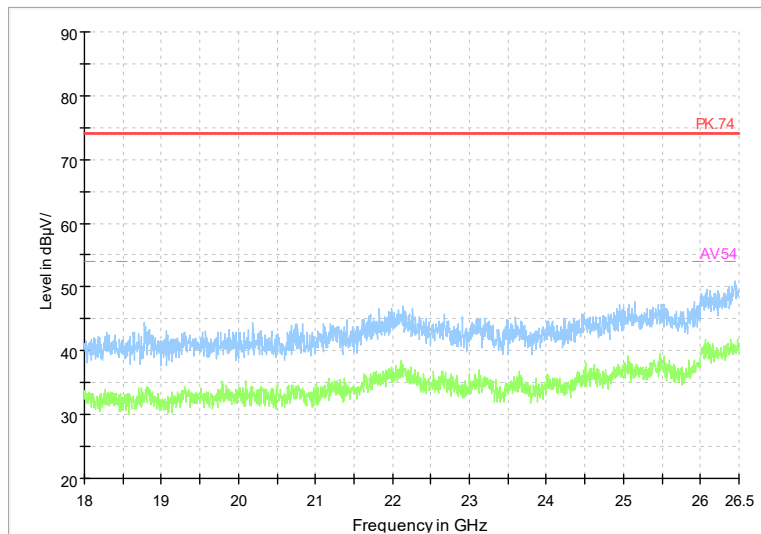
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

Full Spectrum



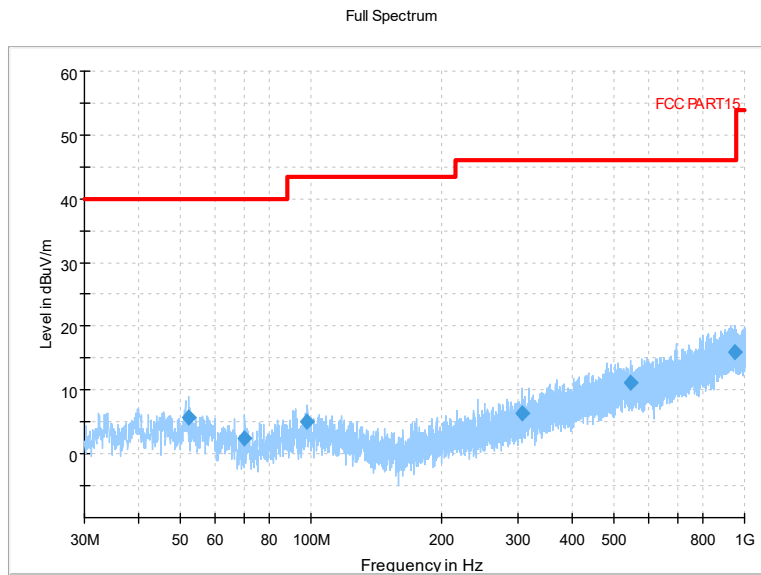
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

Full Spectrum

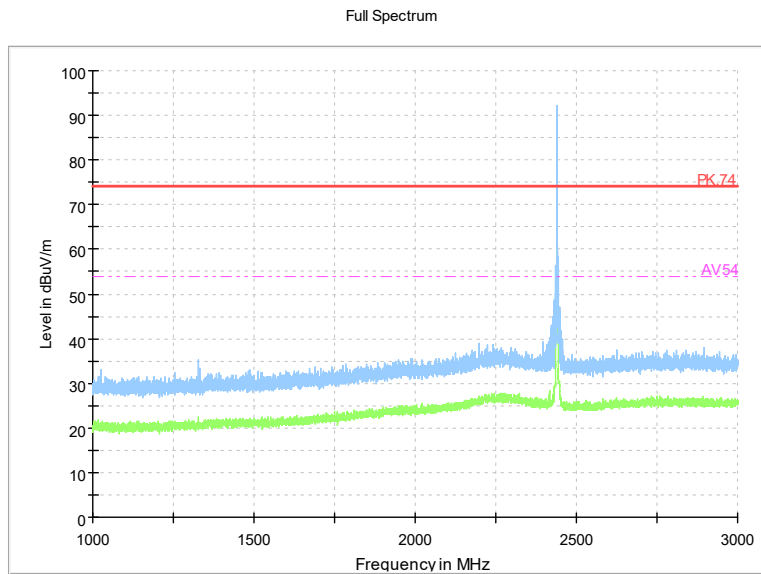


Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

Channel No.:19

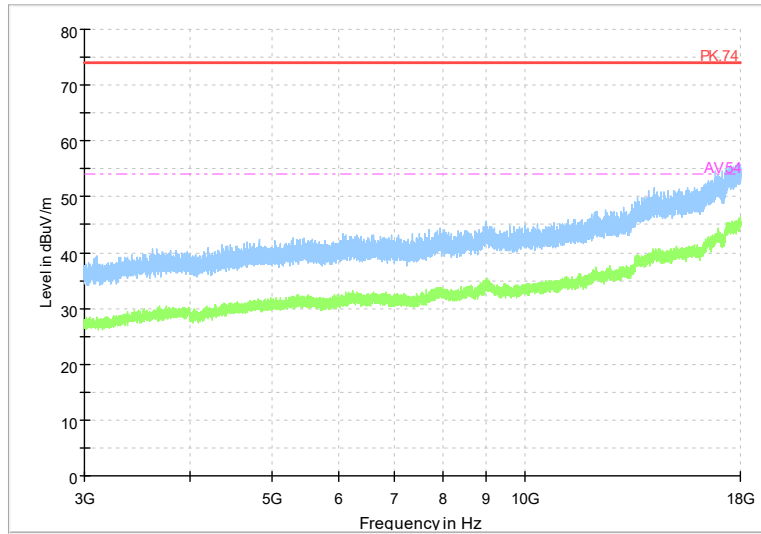


Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 500K



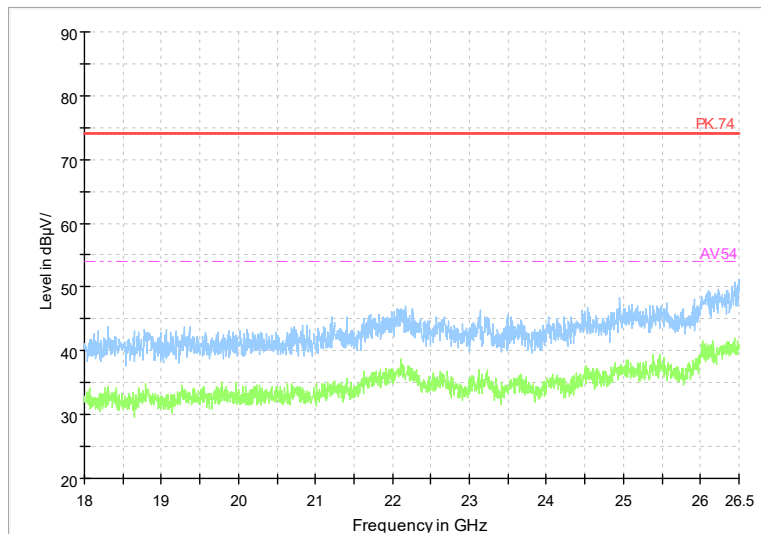
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

Full Spectrum



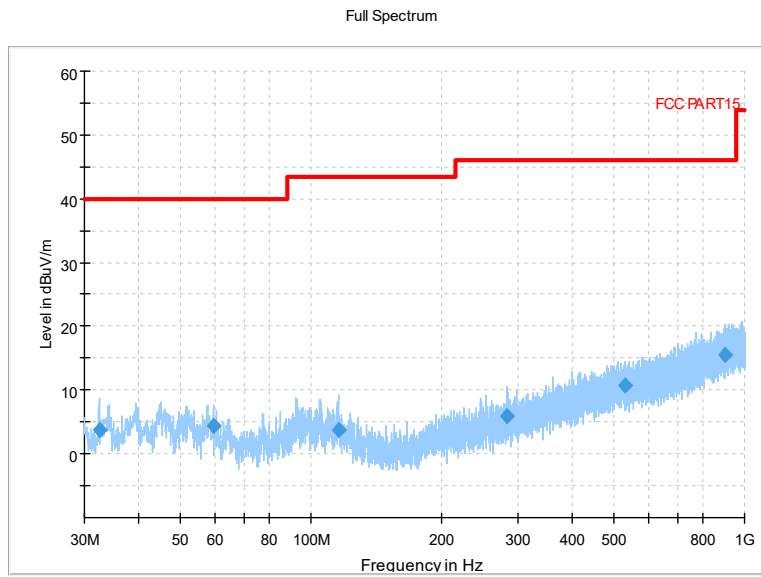
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

Full Spectrum

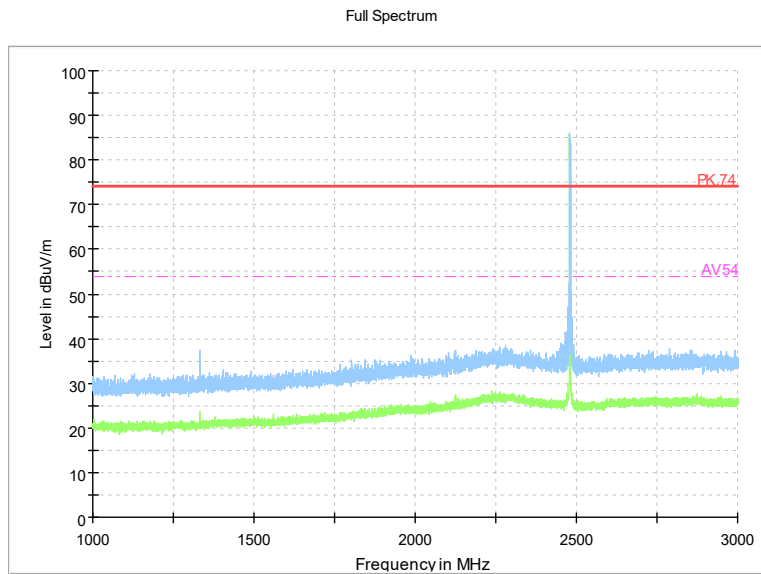


Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

Channel No.:39

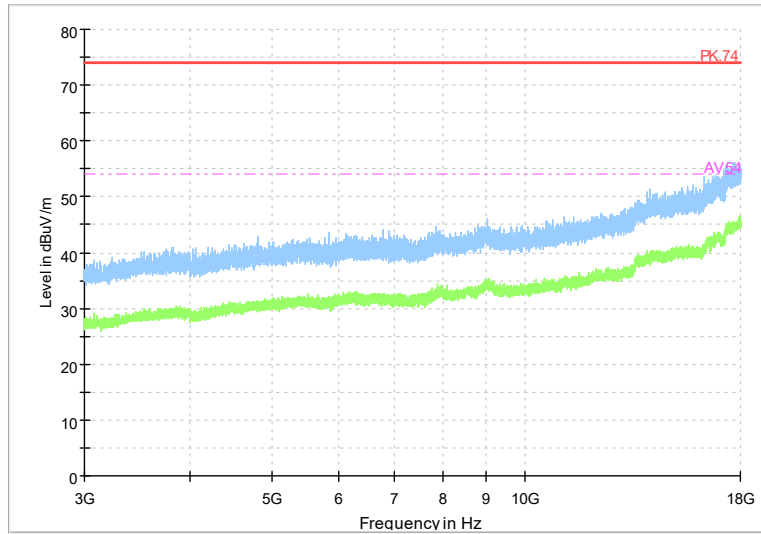


Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 500K



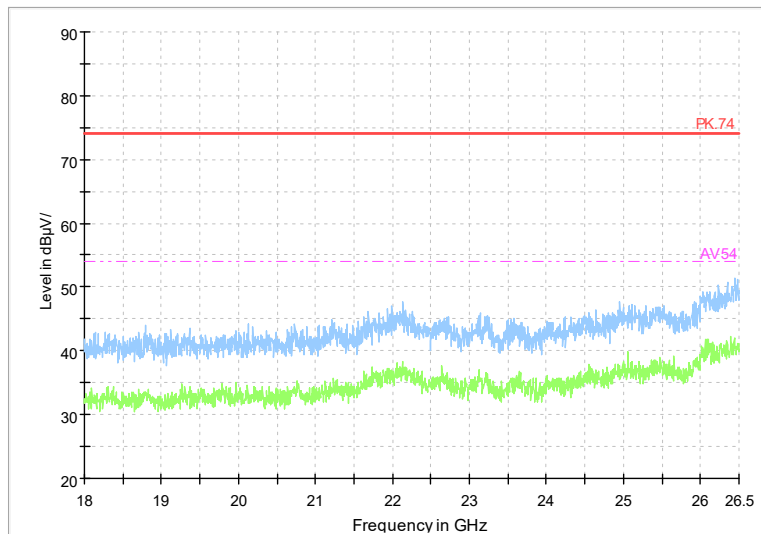
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

Full Spectrum



Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

Full Spectrum



Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

---End of Test Report---